4-1-1917

South Dakota State College of Agriculture and Mechanic Arts: Annual Catalog 1916-1917 with Announcements for the Year 1917-1918

South Dakota State College of Agriculture and Mechanic Arts

Vol IV April 1917 No. IX.

South Dakota

State College of Agriculture and Mechanic Arts

BULLETIN

Annual Catalog, 1916-1917

With Announcements for the Year 1917-1918

Published Quarterly by

THE SOUTH DAKOTA STATE COLLEGE

Brookings, S. D.

Entered as second-class matter August 10, 1908, at the post-office at Brookings, S. D., under Act of July 16, 1904

College Calendar for 1917-1918

FIRST SEMESTER

1917

June 11-July 20—Six weeks Summer School.

September 17-18—Entrance examinations and registration.

September 19—Work of first semester begins at 8 o'clock a. m.

November 1—Last day for announcing subjects of theses.

October 29—Enrollment in the School of Agriculture.

November 29-30—Thanksgiving recess.

December 20—Christmas vacation begins at 4:00 p. m.

1918

January 8—Christmas vacation ends at 8:00 a. m.

January 28-February 1—Examination week.

SECOND SEMESTER

February 5—Second semester begins at 8:00 a. m.

March 28—School of Agriculture closes.

May 20—Senior vacation begins.

May 31—College work closes.

June 2—Baccalaureate Sunday.

June 5—Commencement exercises at 10:30 a. m.

Calendar of Short Courses

January 8-May 31—Course in farm mechanics.

January 8-March 15—Three months creamery course.

December 31-January 6—Farm and Home Course.

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JANUARY.

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JANUARY.

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DECEMBER.

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Regents of Education

Hon. T. W. Dwight ..... Sioux Falls
Hon. August Frieberg ..... Beresford
Hon. Frank Anderson ..... Webster
Hon. J. W. Campbell ..... Huron
Hon. T. D. Potwin ..... Lemmon

OFFICERS OF THE BOARD

Hon. T. W. Dwight ..... President
Hon. I. D. Aldrich ..... Secretary
Hon. G. H. Helgerson (State Treasurer) ..... Treasurer

Regents' Committee for the College

Hon. T. W. Dwight — Hon. J. W. Campbell

Statement of the Ownership, Management, Circulation, Etc.

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Name of — Post office Address.

Editor, G. L. Brown, Dean of College ..... Brookings, South Dakota
Publisher, South Dakota State College of Agriculture and Mechanic Arts ..... Brookings, South Dakota
Owners, South Dakota State College of Agriculture and Mechanic Arts ..... Brookings, South Dakota
Known bondholders, mortgagees, and other security holders, holding 1 per cent or more of total amount of bonds, mortgages, or other securities: None.

ELLWOOD C. PERISHO,
President of College.

Sworn to and subscribed before me this 16th day of April, 1917.

R. A. LARSON,
Notary Public.

(Seal)

(My commission expires June 5, 1917.)

*Faculty

ELLWOOD CHAPPELL PERISHO, A. M., M. S., LL. D., President.

B. S., Earlham College, 1887; A. M., Earlham College, 1889; Professor of Mathematics, Guilford College, North Carolina, 1888-1892; scholar, University of Chicago, 1893-1894; fellow, 1894-1895; M. S., University of Chicago, 1895; Professor of Geology, State School, Platteville, Wis., 1895-1903; Professor of Geology, University of South Dakota, and State Geologist, 1903-1914; Dean, College of Arts and Sciences, University of South Dakota, 1907-1914; present position since 1914.

GEORGE LINCOLN BROWN, Ph. D., Dean, Vice President, and Professor of Mathematics.

B. S., University of Missouri, 1892; teaching fellow in Mathematics, 1892-1893; M. S., 1893, same institution; fellow in Mathematics, University of Chicago, 1894-1896; Ph. D., University of Chicago, 1900; Professor of Mathematics, South Dakota Agricultural College, 1897-1910; Acting President, South Dakota State College, summer and fall of 1908; Dean of the faculty, 1910; Vice-President, 1913; Acting President, February 1 to August 1, 1914; present position since 1914.

JAMES WILBUR WILSON, M. S. A., Professor of Animal Husbandry; Director and Animal Husbandman of the Experiment Station.

B. S. A., Iowa Agricultural College, 1896; M. S. A., Iowa Agricultural College, 1898; Assistant in Agriculture, Iowa Agricultural College, 1896-1897; Private Secretary to Secretary of Agriculture, 1897-1900; present position since 1902.

GORDON W. RANDLETT, B. S. A., Director of the Extension Division.

Graduate of Iowa State Normal School, 1895; B. S. A., North Dakota Agricultural College, 1908; teacher, public schools of Iowa, 10 years; Instructor in Applied Agriculture, North Dakota Agricultural College, 1905-1908; Assistant Professor, same institution, 1908-1909; Director College Extension, same institution, 1909-1915; Superintendent Farmers Institutes, North Dakota, 1913-1915; present position since June, 1915.

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*With the exception of the President, Dean, Director of the Experiment Station and Director of the Extension Division, the names occur in the order of appointment.

JAMES HENRY SHEPARD, B. S., Professor of Chemistry; Chemist of the Experiment Station.

B. S., University of Michigan, 1875; post-graduate student in University of Michigan, 1881-1882; Instructor in Natural Sciences, Ypsilanti High School, Michigan, 1882-1886; present position since 1888.

HALVOR CHRISTIAN SOLBERG, M. E., Professor of Mechanical and Steam Engineering.

B. S., South Dakota Agricultural College, 1891; B. M. E., Purdue University, 1895; M. E., Purdue University, 1896; Professor of Practical Mechanics, South Dakota Agricultural College, 1891-1896; present position since 1896.

NIELS EBBESEN HANSEN, M. S., Sc. D., Professor of Horticulture and Forestry; Vice Director and Horticulturist of the Experiment Station.

B. S., Iowa Agricultural College, 1887; M. S., Iowa Agricultural College, 1894; with Commercial Iowa Nurseries, Atlantic and Des Moines, 1888-1891; Assistant Professor of Horticulture, Iowa Agricultural College, 1891-1895; studied in Europe, 1894; Agricultural Explorer for U. S. Department of Agriculture to Europe and Asia, 1897-1898 and 1906-1907; to Siberia, Turkestan and Algiers, 1908-1909; for South Dakota, to Siberia, 1913; Sc. D., University of South Dakota, 1917; present position since 1895.

HUBERT BERTON MATHEWS, M. S., Professor of Physics.

B. S., South Dakota Agricultural College, 1892; M. S., South Dakota Agricultural College, 1899; pursued special work at various times in the Universities of Michigan, Wisconsin and Nebraska; Superintendent of City Schools, Clark, S. D., 1892-1893; Assistant in Chemistry and Physics, South Dakota Agricultural College, 1893-1896; Professor of Physics, 1896-1899; Professor of Physics and Electrical Engineering, 1899-1909; Vice-President, 1904-1906; present position since 1909.

***BOWER THOMAS WHITEHEAD, M. S., Ph. C., Professor of Pharmacy.**

Ph. G., South Dakota Agricultural College, 1895; Ph. C., Northwestern University, 1896; B. S., South Dakota Agricultural College, 1897; M. S., South Dakota Agricultural College, 1901; Instructor in Pharmacy, South Dakota Agricultural College, 1895; present position since 1896.

ADA B. CALDWELL.

Student, Chicago Art Institute, 1893-1897; of Teachers College,

N. Y. and Chase School of Art, 1903-1904; student in summer schools, Handicraft Guild, Minneapolis, 1905-1906-1907; Commonwealth Art School, Maine, 1910; N. Y. Chautauqua Art School, 1911 and 1912; N. Y. Art League, School of Landscape, 1912 and 1913; present position since 1899.

*Died April 1, 1917.

ALBERT SPENCER HARDING, A. M., Professor of History and Political Science.

B. S., South Dakota Agricultural College, 1892; fellow in American History, University of Nebraska, 1896-1897; A. M., University of Nebraska, 1897; Assistant in History and Civics, South Dakota Agricultural College, 1897-1900; student, University of Wisconsin, 1898, and summer session, 1907; Instructor in American History, University of Nebraska, summer session, 1909; present position since 1901.

ROBERT BLACKWOOD FORSEE, Pe. P., Principal of the Preparatory Department.

Principal of Pedagogy, Western College, Missouri, 1888; Principal of Schools at Elgin, Mo., 1889-1891; at Steffenville, 1892-1893; at Estelline, South Dakota, 1895-1896; County Superintendent of Schools, Hamlin County, South Dakota, 1896-1900; present position since 1901.

WILLIAM HOWARD POWERS, A. B., A. M., Librarian and Associate Professor of English.

A. B., Miami University, 1891; A. M., Harvard University, 1899; student in the Graduate School, Harvard, 1899-1901; Instructor in Mathematics, Ohio Normal University, 1888-1889; Master of the High School, Harwich, Massachusetts, 1892-1895; Head of the Department of English, High School, Pawtucket, Rhode Island, 1895-1898; Professor of English, Huron College, 1901-1905; member State Library Commission, 1913—; present position since 1905.

CHRISTIAN LARSEN, M. S. A., Professor of Dairy Husbandry; Dairy Husbandman of the Experiment Station.

B. S. A., Iowa State College, 1902; M. S. A., Iowa State College, 1904; studied European dairying, 1900; Dairy Instructor, Massachusetts Agricultural College, 1901; Assistant and Associate Professor of Dairying, Iowa State College, 1902-1906; Professor of Dairy Husbandry, Utah Agricultural College, 1907; present position since 1907.

MADISON CLAIR BATES, A. M., Professor of English.

A. B., Williams College, 1904; A. M., Williams College, 1905; A. M., Harvard University, 1906; Instructor in English, University of

Illinois, 1906-1907, and summer session, 1907; scholar in English, Graduate School, Columbia University, 1909-1910; present position since 1907.

BYRON BRIGGS BRACKETT, A. M., Ph. D., Professor of Electrical Engineering.

A. B., Syracuse University, 1890; A. M., Syracuse University, 1893; Certificate of Proficiency in Electrical Engineering, Johns Hopkins University, 1895; Ph. D., Johns Hopkins University, 1897; Teacher of Mathematics, Williamsport, Pa., and Brooklyn, N. Y., 1890-1893; Instructor, Electrical Engineering, Johns Hopkins University, 1894-1897; Instructor, Electrical Engineering, Union College, 1897-1898; Washington, D. C., 1898-1900; Electrical Science, Rutgers College, 1901-1903; Professor of Electrical Engineering, Clarkson School of Technology, 1903-1909; Inspector of Torpedo Cable for U. S. Army, summer of 1898; Electrical Engineer for Rowland Telegraphic Company, Baltimore, Md., 1900-1901; present position since 1909.

HARRY C. SEVERIN, B. A., M. A., Professor of Entomology and Nature Study; Entomologist of Experiment Station.

B. A., University of Wisconsin, 1906; M. A., Ohio University, 1908; fellow in Zoology and Entomology, Ohio State University, 1908-1909; Assistant to State Entomologist, Illinois, summer of 1909; present position since 1909.

ROBERTSON COOK, M. E., Professor of Experimental Engineering.

M. E., University of Minnesota, 1902; Assistant Instructor in Mechanical Engineering, University of Minnesota, 1903; Engineer with Oliver Iron Mining Company, Duluth, Minnesota, 1904; Mechanical Engineer for the Western Lime and Cement Company, Milwaukee, Wisconsin, 1904-1908; Instructor in Mechanical and Steam Engineering, South Dakota State College, 1908-1910; Member Am. Soc. M. E., present position since 1910.

***SHIRLEY PUTNAM MILLER, B. S., M. A., Professor of Zoology and Rural Sanitation.**

B. S., South Dakota State College, 1903; M. A., University of Minnesota, 1905; student at Minnesota Sea-side Laboratory, Vancouver Island, 1902-1904; Instructor in Zoology, South Dakota State College, 1905-1908; student at the Anatomical-Biological Institute, Berlin, and the University of Munich, 1908-1910; investigator in Russian Zoological Laboratory, Villafranche, on the Mediterranean; fellow assistant, Department of Anatomy, University of Chicago, 1916-1917; present position since 1910.

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*Absent on leave during 1916-1917 to do advanced work in the University of Chicago.

GEORGE ARTHUR STARRING, A. B., Agricultural Editor.

A. B., Huron College, 1907; graduate Huron Business College; student, Rochester Seminary, N. Y., 1907-1908; of University of Chicago, 1908-1909; summer quarter, University of Chicago, 1909; Instructor in Commerce and Economics, Sioux City High School, 1909-1910; Professor of Commerce, South Dakota State College, 1910; present position since 1911.

ALBERT NASH HUME, B. S. A., M. S., Ph. D., Professor of Agronomy; Agronomist of Experiment Station.

B. S. A., Purdue University, 1900; M. S., Purdue University, 1902; Live Stock Husbandman, North Louisiana Experiment Station; Instructor in Agriculture, Wenona Agricultural Institute, 1903; Instructor, Associate, Assistant Professor of Crop Production, University of Illinois and Agricultural Experiment Station, 1904-1911; student Leipzig, Germany, winter semester, 1908-1909; student Goettingen, Germany, summer semester, 1909 to winter semester 1910; Ph. D., Goettingen, December, 1910; present position since 1911.

GARNETT HEDGE, Mus. Bac., Professor of Music.

Graduated from Des Moines Musical College, Des Moines, Iowa, 1894; post-graduate in same institution, 1896; studied with Karleton Hackett, American Conservatory, Chicago, 1897-1898; taught in American Conservatory, sang with Castle Square Opera Co., and studied with Arthur Beresford, 1898-1899; taught at Heading College, Abingdon, Ill., 1899-1900; Supervisor of Public School Music, Lead and Deadwood (S. D.) schools, 1900-1901; traveled with Minneapolis Symphony Orchestra, 1908-1909-1910; and with Thomas Orchestra, February, 1910; studied summer 1909, with Madame Friedenburg, New York; Dean of Huron College School of Music, Huron, S. D., 1910-1912; present position since 1912.

CHRISTY WILLIAM MICHEL, A. M., Professor of Botany.

A. B., Litt. B., Ohio Wesleyan University, 1904; A. M., Harvard University, 1912; elected Austin Scholar in Botany, Graduate School, Harvard University, 1911, and Scholar in Yale University, for the same year; received appointment as assistant in Botany, Harvard University, 1912, and Fellow in Botany in the University of Wisconsin; student Harvard University, second semester of 1905-1906 and the year of 1911-1912; of Ohio State University, 1908-1909; Superintendent of Schools, Mercer, Ohio, 1904-1905; Professor of Biology, Defiance College, 1906-1908 and 1909-1911; present position since 1912.

HARRY W. EWING, Professor of Physical Education.

Student University of Nebraska, Academic Courses, 1904-1907;

Assistant Coach, University of Nebraska, 1910-1911; Director of Athletics, Morningside College, 1911-1912; present position since 1912.

ALBERT JONES WILLIS, C. E., Professor of Civil Engineering.

C. E., Lehigh University, 1905; Assistant Engineer of Construction and Repair, Bethlehem Steel Co., 1905-1906; Instructor in Civil Engineering, Lehigh University, 1906-1908; Instructor in Civil Engineering, Armour Institute of Technology, 1908-1910; Structural Draftsman with C. M. & St. P. R. R., summer of 1909; Structural Steel Draftsman and Checker with the Guerber Engineering Co., summers of 1910, 1911, 1912, 1914; Instructor in Civil Engineering, Cooper Union, New York City, 1910-1913; in charge of property survey and laying out of public roads in Cambria County, Pa., summer of 1913; Bridge Designer, New York State Barge Canal, summer of 1916; Assoc. M. Am. Soc. C. E.; present position since 1913.

BELLA SPENCER, A. B., Professor of Modern Languages.

A. B., Kansas State Univ., 1899; student, University of Goettingen, Germany, 1898-1899; student, University of Zurich, Zurich, Switzerland, 1899-1904; Instructor in Modern Language, City High School, Portland, Oregon, 1904-1905; Instructor in Modern Language, LaSalle-Peru Township High School, LaSalle, Ill.; present position since 1913.

CHARLES CLINTON LIPP, D. V. M., Professor of Veterinary Medicine; Veterinarian of Experiment Station.

Student Poland Union Seminary, North Eastern Ohio Normal College; D. V. M., Ohio State University, College of Veterinary Medicine; present position since 1913.

ERNEST D. STIVERS, B. S., Professor Secondary Agricultural Education; Director of Summer School.

B. S., Iowa State College, 1901; Science Teacher, High School, Mason City, Ia., 1901-1904; Superintendent of Schools, Parker, S. D., 1904-1910; student special work in Agriculture, Iowa State College, 1910-1911; Principal of Agricultural High School, Prescott, Arkansas, 1911-1912; Agricultural Editor, International Correspondence Schools, Scranton, Pa., 1912-1913; present position since 1913.

CHARLES F. SCHLATTER, B. S., Professor of Commercial Science.

Graduate Southern Iowa Normal, 1902; Instructor in Mathematics, Southern Iowa Normal, 1904-1905; Instructor in Pedagogy, Southern Iowa Normal, summer 1905; graduate Gem City Business College, 1906; Superintendent of Schools, Dunlap, Illinois, 1906-1909; Instructor in Commerce, Sioux City High School, 1909-1910; student Drake University, summer quarters, 1909 and 1910; Principal Department of Commerce, LaSalle-Peru Township High

School, LaSalle, Illinois, 1910-1911; student at University of Chicago, summer quarters, 1913 and 1915; B. S., South Dakota State College, 1916; present position since 1911.

FRANK EMERSON BROWN, A. M., Professor of Public Speaking.

A. B., Knox College, 1902; A. M., Knox College, 1908; Illinois Representative Interstate Oratorical Contest, St. Paul, 1902; student, Emerson College of Oratory, Boston, 1902-1903; student, University of Chicago, Summer School, 1908; Instructor in English and Oratory, Mercersburg Academy, Mercersburg, Pennsylvania, 1903-1905; Professor of Public Speaking, Drake University, 1905-1914; present position since 1914.

***STEPHEN DECATUR van BENTHUYSEN, A. M., Professor of Rural Economics and Sociology.**

Graduate of the Central Normal College and Business Institute, Great Bend, Kansas, 1893; A. M., University of Puget Sound, 1912; Instructor Business Department, Academy, Appleton City, Mo., 1893-1896; Principal Business Department, College, Rich Hill, Mo., 1896-1899; Principal School of Commerce, Grand Prairie Seminary, Onarga, Illinois, 1899-1906; student, School of Commerce and Administration, University of Chicago, 1905; Dean of the School of Commerce, Dakota Wesleyan University, 1906-1915; present position since 1915.

*Absent on leave during the year 1916-1917.

CHARLES HARVEY BRADY, A. M., Professor of Education.

B. S., Indiana Tri-State College, 1902; A. B., University of Indiana, 1907; scholar in Education and Psychology, Graduate School, University of Indiana, 1908; A. M., Columbia University, 1912; scholar in Education, Graduate School, Columbia University, 1914-1915; Principal Consolidated Agricultural High School, Indiana, 1900-1906; Principal High School, Bloomfield, Indiana, 1907-1908; Principal High School, Wabash, Indiana, 1908-1911; Professor of Education, State Teachers' College, Colorado, 1912-1914; Director Secondary Education, University of Indiana, summer school, 1914; present position since 1915.

MABEL WARD, B. S., Professor of Home Economics.

B. S., Columbia University, 1910; graduate student, and Assistant in Home Economics, University of Chicago, 1914-1916; Professor of Home Economics, Mississippi State College for Women, 1905-1914; Instructor in Home Economics, University of Mississippi, summer term, 1913; Instructor in Home Economics, George Peabody College, summer quarter, 1914; Instructor in Home Economics, University of Chicago, summer quarters, 1915-1916-1917; present position since 1916.

JOSEPH MATSON, CAPTAIN, COAST ARTILLERY CORPS, U. S. ARMY, Professor of Military Science and Tactics.

Student Parsons College, 1897-1898; Sergeant Co. M., 50th Iowa Infantry, April 26 to November 30, 1898, Jacksonville, Fla.; 1st Lieut., 34th U. S. Volunteers, July 5, 1899, to April 17, 1901, Philippine Islands; 2nd Lieut., Artillery Corps, U. S. Army, June 13, 1901, Fort Morgan, Ala.; 1st Lieut., Coast Artillery Corps, June 2, 1903, Portland, Maine; Captain Coast Artillery Corps, January 25, 1907, Fort Monroe, Va., Fort Washington, Md., Fort Hamilton, N. Y.; Graduate Coast Artillery School, 1908; present station since October, 1916.

JOSEPH GLADDEN HUTTON, B. S., M. S., Associate Professor of Agronomy.

Graduate of Indiana State Normal School, Terre Haute, 1899; S. B., University of Chicago, 1908; M. S., University of Illinois, 1910; teacher in Indiana District Schools, 1891-1895; Assistant in Biological Laboratory, Indiana State Normal School, 1898-1899; Instructor in Physiology, Indiana State Normal School, 1899-1900; Curator's Assistant, Marine Biological Laboratory, Wood's Hole, Mass., summer, 1901; Principal, Beardstown (Ill.) High School, 1901-1903; Superintendent of Schools, Beardstown (Ill.), 1903-1908; Instructor in Psychology, Indiana State Normal School, summer, 1908; Assistant in Geology and Graduate School in Botany, Geology and Soils, University of Illinois, 1908-1911; Field Assistant, Illinois State Geological Survey, summer, 1909; present position since 1911.

B. A. DUNBAR, A. M., Associate Professor of Chemistry.

A. B., Ohio Wesleyan University, 1891; A. M., Ohio Wesleyan University, 1892; Instructor in Mathematics and Physics, Hillsboro Normal College, Hillsboro, Ohio, 1891-1893; Instructor in Physics, High School, Ironton, Ohio, 1893-1895; Supt. of Schools, Michigan, Wyoming, Minnesota and North Dakota, 1895-1910; student in Chemistry, University of Chicago, 1909-1910; Assistant Professor of Chemistry, South Dakota State College, 1911-1912; present position since 1912.

BENJAMIN LEE THOMPSON, B. Sc., Associate Professor of Animal Husbandry.

B. Sc. in Agriculture, Ohio State University, 1908; Professor of Animal Husbandry and Dairying, Dunn County School of Agriculture, Menomonie, Wis., 1908-1909; Instructor in Animal Husbandry, South Dakota State College, 1909-1912; present position since 1912.

HOWARD H. HOY, B. S., M. S., Associate Professor of Physics and Mechanical Engineering.

B. S., South Dakota Agricultural College, 1896; M. S., South

Dakota Agricultural College, 1903; pursued special work in electrical engineering in the Universities of Nebraska and Wisconsin; Instructor in Mechanical and Electrical Engineering, South Dakota Agricultural College, 1899-1904; Instructor in Physics and Electrical Engineering, 1904-1914; Assistant Professor in same departments, 1914-1915; present position since 1915.

W. ALBERT PETERSON, Mus. Bac., Assistant Professor of Music.

Qualified as teacher, Illinois Wesleyan Conservatory, 1901; graduate American Conservatory, Chicago, 1909; post-graduate same institution, 1911; pupil of Allen Spencer, pianist, and Adolph Weidig and George Colburn, harmony, counter-point, composition, etc.; Instructor, Huron College, Huron, S. D., 1911-1912; present position since 1912.

MAUD A. GODDARD, Assistant Professor of Art.

Student Art Institute, Chicago, 1903; School of Fine Arts, Minneapolis, summer 1907; Commonwealth Art School, Maine, summer 1910; Jewelry School, Ronkonkoma, Long Island, summers 1912 and 1913; Art School, Chautauqua, N. Y., summers 1909 and 1915; Instructor Industrial Art, South Dakota State College, 1903-1914; present position since 1914.

CARL CHRISTENSEN, Assistant Professor of Music, Violin and Other Instruments.

Student under Professor Christian Madsen of Copenhagen, Denmark; studied with C. F. Toenniges, of Davenport, Iowa, 1900, 1901; with Alfred Speil, Minneapolis, 1908, 1909; and with William McPhail, Minneapolis, summer of 1912; Instructor in Music, South Dakota State College, 1906-1914; present position since 1914.

GERTRUDE S. YOUNG, A. B., Assistant Professor of English and History.

A. B., University of Wisconsin, 1906; summer sessions, Cornell University, 1911 and 1916, University of Chicago, 1912, University of Wisconsin, 1913 and 1915; Instructor in History and English, South Dakota State College, 1907-1914; present position since 1914.

MANLEY CHAMPLIN, B. S., M. S., Assistant Professor in Agronomy.

B. S., South Dakota State College, 1909; M. S., same institution, 1914; employed as special agent, 1909, scientific assistant, 1910, and collaborator from 1911 to present time in charge of cooperative cereal investigations, U. S. Department of Agriculture and South Dakota Experiment Station; Assistant General Superintendent of Experiment farms for South Dakota State College since 1911; Assistant in Agronomy, S. D. State College, 1911-1914; present position since 1914.

CLIFFORD N. MILLS, B. S., A. M., Assistant Professor of Mathematics.

B. S., Franklin College, Indiana, 1910; graduate student Indiana University, summers 1910 and 1912, fellow, Indiana University, 1913-1914; A. M., Indiana University, 1915; teacher, Public School, Jennings Co., Indiana, 1904-1905; Instructor in Mathematics, Franklin High School, Indiana, 1908-1910; Tutor in Mathematics, Franklin College, Indiana, 1908; Professor of Mathematics, Highland College, Kansas, 1910-1913; Instructor in Mathematics, South Dakota State College, 1913-1914; present position since 1914.

JOHN A. BONELL, Assistant Professor of Mechanical Engineering.

Student Stout Institute, 1904, and State Normal School, Oshkosh, Wis., summer 1905; Assistant and Instructor in Farm Mechanics, Marathon County School of Agriculture, Wausau, Wis., 1905-1910; attended Stout Institute, summer 1910; Instructor in Shopwork, South Dakota State College, 1910-1915; present position since 1915.

WILLIAM MONROE MAIR, Superintendent of Boys' and Girls' Clubs, Extension Division.

Studied three years in Oberlin College and Theological Seminary; traveled in Europe one year; Principal of Schools, Garretson, S. D., two and a half years; County Superintendent of Schools in Minnehaha County, four years; present position since 1913.

WARD A. OSTRANDER, B. S., M. S., District Agricultural Agent, Extension Division.

B. S., Lawrence College, 1911; M. S., University of Wisconsin, 1914; present position since 1914.

GUY MORRISON, B. S., District Agricultural Agent, Extension Division.

B. S., South Dakota State College, 1913; present position since 1914.

EDWARD R. BINNEWIES, B. S., M. S., Assistant Professor of Chemistry.

B. S., South Dakota State College, 1913; M. S., South Dakota State College, 1915; Assistant in Chemistry, South Dakota State College, 1913-1915; Instructor in Chemistry, 1915-1916; Graduate Student, University of Chicago, summer quarter, 1915; present position since 1916.

VERN R. JONES, B. S., M. S. A., Assistant Professor of Dairy Husbandry.

Assistant Dairyman, Washington State College, 1911-1912; B. S. in Dairying, same college, 1912; Instructor in Dairying, same college,

1912-1913; Assistant in Dairy Husbandry, Cornell University, 1913-1915; M. S. A., Cornell University, 1915; Instructor in Dairy Husbandry, South Dakota State College, 1915-1916; present position since 1916.

FRANK E. McCALL, B. S., Extension Specialist in Horticulture.

B. S., Horticulture and Forestry, Iowa State College, 1911; with Commercial Nurseries, Idaho and Washington, 1911; manager Berryhill Fruit Farm, Des Moines, Iowa, 1912-1913; Agriculturist, Public Schools, South St. Paul, Minn., 1914-1915; orchardist, Iowa, 1915-1916; present position since 1916.

JOHN T. E. DINWOODIE, V. M. D., Extension Specialist in Control of Animal Diseases.

V. M. D., North Dakota Agricultural College, 1909; Student, Veterinary Dept., U. of Pennsylvania, 1913; Assistant Veterinarian, station staff, U. of Minnesota, 1913-1914 and 1915-1916; with Commercial Serum Plant, South St. Paul, 1914-1915; present position since 1916.

RALPH L. PATTY, B. Di., B. S. in A. E., Extension Specialist in Agricultural Engineering.

B. Di., Iowa State Teachers College, 1907; B. S. in A. E., Iowa State College, 1916; Instructor in Science, High school, Winterset, Iowa, 1907-1909; Principal, High School, Brookings, S. D., 1909-1913; present position since 1916.

Instructors and Assistants

FRED C. STOLTENBERG, Florist and Assistant in Horticulture.

Present position since 1906.

HOWARD LOOMIS, A. B., Assistant in Agronomy.

A. B., Albion College, 1909; Instructor in Chemistry and Physics, Union City, Ind., High School, 1909-1910; present position since 1910.

NELLIE G. KENDALL, B. S., Instructor in English.

B. S., South Dakota State College, 1908; post-graduate student, South Dakota State College, 1909; graduate of Cumnock School of Oratory, 1911; present position since 1912.

WM. J. WILSON, Ph. G., Assistant in Serum Production.

Ph. G., Montreal College of Pharmacy; Member Pharmaceutical Association of the Province of Quebec; present position since 1913.

GEORGE PHILLIPS, B. S., Student Adviser.

B. S., South Dakota State College, 1909; scholar, University of Wisconsin, 1910-1911; Instructor in Mechanical Engineering, South Dakota State College, 1912-1914; present position since 1914.

MATTHEW FOWLDS, B. S., Assistant in Agronomy.

B. S., South Dakota State College, 1913; Assistant in Entomology, South Dakota State College, 1913-1914; present position since 1914.

HARRY RILLING, B. S., M. S., Assistant in Agronomy.

B. S., South Dakota State College, 1913; M. S., South Dakota State College, 1916; present position since 1914.

REGINALD SHERWOOD, B. S., M. S., Assistant Station Chemist.

B. S., South Dakota State College, 1914; M. S., South Dakota State College, 1916; Assistant in Chemistry, South Dakota State College, 1914-1916; present position since 1916.

DILLA E. WIMPLE, B. A., M. A., Demonstrator in Home Economics, Extension Division.

B. A., University of South Dakota, 1904; M. A., University of South Dakota, 1906; student at Berlitz School of Modern Languages, Chicago, summer session, 1904; Instructor in German, University of South Dakota, 1904-1907; Teacher of rural schools, 1908-1909; Principal of High School, Harrisburg, S. D., 1909-1910; County Superintendent of Schools, Lincoln County, S. D., 1911-1914; Instructor in German, South Dakota State College, 1914-1916; present position since 1916.

EDWIN H. HUNGERFORD, M. S., Assistant in Dairy Husbandry.

Graduate Kansas State Agricultural College, 1912; Graduate Assistant in Chemistry, 1912-1913; Fellow in Chemistry, 1913-1914; Master of Science in Chemistry, Kansas State Agricultural College, 1914; present position since 1914.

GEORGE GILBERTSON, M. S., Instructor in Entomology.

B. S., South Dakota State College, 1914; M. S., South Dakota State College, 1916; present position since 1914.

WILSON CRAMER, JR., Instructor in Animal Husbandry.

Present position since 1914.

GERTRUDE McKNIGHT, Instructor in the School of Agriculture.

Present position since 1915.

T. A. MEEHAN, Specialist in Dairying, Extension Division.

Present position since 1915.

HENRIETTA SMITH, Instructor in Violin.

Present position since 1915.

ARTHUR LYNCH, B. S., Assistant in Dairy Husbandry.

B. S., South Dakota State College, 1915; present position since 1915.

EARL R. SERLES, Ph. G., B. S., Instructor in Pharmacy and Chemistry.

Ph. G., 1911, B. S., 1915, South Dakota State College; Registered Druggist, South Dakota, 1912; present position since 1915.

SYLVIA CLISBY, Mus. B., Instructor in Piano and 'Cello.

Mus. B., Oberlin Conservatory, 1914; Chautauqua and Lyceum work, 1914-1915; present position since 1916.

MAX M. MAHANY, A. B., LL. B., Instructor in Spanish and Secretary to the President.

B. A., LL. B., South Dakota State University, 1914; Secretary to the President, 1915-1916; present position since 1916.

HAROLD MILLER, B. S., Assistant in Zoology and Rural Sanitation.

B. S., South Dakota State College, 1916; graduate student in Howard School of Public Health, summer of 1916; present position since 1916.

LEWIS E. NELSON, B. S., Assistant in Zoology and Rural Sanitation.

B. S., South Dakota State College, 1916; graduate student in Anatomical Institute, University of Minnesota, summer of 1916; present position since 1916.

IONA BURROWS, B. S., Mus. Bac., Instructor in Pipe Organ and Piano, and Accompanist in the Department of Music.

B. S., Mus. Bac., Coe College, 1916; present position since 1916.

IDA ELIZABETH TRIMBLE, Mus. Bac., Instructor in Voice.

Mus. Bac., Monroe College, W. Va., 1907; Instructor in Voice and Piano, St. James Episcopal School, Alexandria, La., 1910-1911; and at Blackshear Military Institute, 1911-1913; post graduate student, American Conservatory of Music, Chicago, 1916; present position since 1916.

JOE M. ELDRIDGE, B. S., Instructor in Dairy Husbandry.

B. S., Iowa State College, 1916; present position since 1916.

WALDINE B. SCHNEIDER, Ph. B., Instructor in German.

Ph. B., University of Chicago, 1916; Asst. Supervisor of Rural Schools, Stephens Co., Okla., 1911-1913; Principal High School, Fletcher, Okla., 1913-1914; Asst. in German, Edmond State Normal, 1914-1915; present position since 1916.

CATHERINE SWIFT, Instructor in Home Economics.

Graduate of Stout Institute, 1913; Instructor in Home Economics, Mississippi State College for Women, 1913-1916; student of University of Wisconsin, summer session, 1914; of Columbia University, 1916; present position since 1916.

LOUISE LOCKERLY LEATON, B. S., Instructor in Home Economics.

B. S., Illinois Wesleyan University, 1912; Instructor in Home Economics, Lombard College, 1912-1916; graduate student, University of Wisconsin, summer session, 1914, and University of Chicago, 1916; present position since 1916.

ADA B. ERWIN, B. S., Assistant Principal, School of Agriculture, and Instructor in Home Economics.

B. S., South Dakota State College, 1909; student, Teacher's College, Columbia University, summer session, 1911; Instructor in charge of Domestic Art, South Dakota State College, 1911-1913; student, Teacher's College, Columbia University, 1913-1914; B. S., 1914; Instructor in Home Economics, State Normal School, Stevens Point, Wisconsin, 1914-1915; present position since 1916.

R. L. WELCH, Assistant in Mechanical Engineering.

Head of Industrial Department, high school, Somerset, Ky., 1915-1916; present position since 1916.

CHARLES S. ROWE, B. S., Assistant in Chemistry.

B. S., South Dakota State College, 1916; present position since 1916.

N. F. PETERSON, B. A., M. A., Instructor in Botany.

B. A., University of Nebraska, 1907; M. A., 1911; graduate student, University of Chicago, 1914-1916; Curator of the Herbarium, University of Nebraska, 1907-1909; Assistant and Instructor in Botany, Louisiana State University, 1909-1912, and summer of 1915; Science Teacher, Canal Zone High School, Ancon, Panama, 1913-1914; present position since 1916.

CARLTON SHERWOOD, B. A., Instructor in the School of Agriculture.

B. A., University of South Dakota, 1914; Instructor, Fort Pierre High School, 1915; present position since 1916.

INA SIGLINGER, Instructor in Home Economics.

Graduate of Stout Institute, 1912; Instructor in Home Economics, public schools, Parker, South Dakota, 1914-1915; and at Webster, South Dakota, 1915-1916; present position since 1916.

E. GUSSIE KREUTTER, Instructor in the School of Agriculture.

Graduate Valder Normal School; Principal of High School, Parker, South Dakota, 1906-1908; Instructor, Grammar School, Sioux Falls, South Dakota; Principal, Ward School, same city, 1913-1916; present position since 1916.

AGNES MORTON, B. S., Assistant in Boy and Girl Club Work.

B. S., University of Minnesota, 1912; Instructor in Foods and Cookery, School of Agriculture, University of Minnesota, 1912-1917; Instructor in Foods and Cookery, Teacher's Training School, University of Minnesota, 1912-1916; present position since 1916.

HENRY J. LOANE, Assistant in Military Science and Tactics.

Sergeant Coast Artillery Corps, unassigned; present position since December 1916.

SPECIAL LECTURERS

Hon. T. W. Dwight, Regent of Education, Sioux Falls.
Hon. August Frieberg, Regent of Education, Beresford.
Dr. Cline, Portland, Oregon.
Dr. Smith, Washington, D. C.
Mrs. Anna Smith DeVoe, Tacoma, Wash.
Ex-Gov. Eberhart, Minneapolis, Minn.
Secy. Howard Beaver.
Pres. H. K. Warren, Yankton College.
Dr. R. G. Strayer, Columbia University.
Hon. William McMasters, Yankton.
Mr. Elmer Sexauer, Brookings.
Hon. A. E. Chamberlain, Aberdeen.
Prof. Hilton Jones, Mitchell.
Miss Margaret O'Connell, Minneapolis.
Mr. Harlan Bushfield, Miller.
Miss Louise Gleckler, Pierre.
Hon. M. G. Carlisle, Brookings.
Hon. A. B. Dalthorp, Volga.
Hon. Nels Rishoi, Brookings.
Mr. M. E. Culhane, Brookings.
Mr. Ben Schaphorst, Brookings.
Miss Agnes Fenenga, Turkey.
Col. Lee Stover, Watertown.
Hon. Arthur Haasche, Watertown.
Hon. Frank Cannon, Utah.

Other Officers and Employees

R. A. Larson ..... Secretary
Robert Elliott ..... Registrar
Edith Hubbart ..... Assistant Librarian
Nina A. Waters ..... Matron of Dormitory
George E. Purdy ..... Custodian of Buildings and Grounds
A. T. Larson ..... Engineer

Faculty Committees

Faculty Committees will be announced at the beginning of the college year.

General Information

HISTORICAL SKETCH

Establishment.—An act of the Territorial Legislature approved February 21, 1881, provided that "an Agricultural College for the Territory of Dakota be established at Brookings, * * * provided that a tract of land of not less than eighty acres be secured and donated to the Territory of Dakota."

The legislature of 1883 provided for the erection of the first building. This building, now known as the Central Building, was opened for use September 24, 1884.

The Enabling Act admitting the state of South Dakota, approved February 22, 1889, provided that 120,000 acres of land be granted for the use and support of the agricultural college, as provided in the acts of congress making donations of lands for such purpose. The acts of congress here referred to are, primarily, the act of July 2, 1862, known as the Morrill Act, providing that 30,000 acres of public land for each representative in congress be given to each state towards "the endowment, support, and maintenance of at least one college, where the leading object shall be, without excluding scientific and classical studies, and including military tactics, to teach such branches of learning as are related to agriculture and the mechanic arts."

By the Enabling Act of 1889 Congress granted to South Dakota for the Agricultural College 40,000 additional acres, in lieu of a grant that had been made to new states in 1841. Thus the total land grant for the Agricultural College was 160,000 acres.

In the Morrill Act of 1862, such colleges were spoken of as "Colleges of Agriculture and Mechanic Arts." In order that the name might more nearly conform to the object for which the College was established, the legislature of 1907 changed the name from "The Agricultural College of South

Dakota'' to ''The State College of Agriculture and Mechanic Arts.''

The *Experiment Station was organized in 1887 under the Hatch Act of Congress, which provided for the establishment of agricultural experiment stations in connection with agricultural colleges. These stations were established for the purpose of conducting experiments and research work in connection with all branches of the agricultural industries of the United States, due regard being paid to the varying conditions and needs of the respective states. It is also their object to aid in diffusing among the people useful and practical information on all subjects connected with agriculture. The South Dakota Station conducts its investigations chiefly along the following lines: Live stock, veterinary science, soils, field experiments, greenhouse work, trees and small fruits, and chemistry of plant growth and foods.

The *Extension Division was established to carry to the people of the state the results of the work of the College. From its earliest history the College has sent out members of its staff to help the people of the state by addressing meetings, acting as judges at fairs and for agricultural clubs, and in various other ways. The College, however, had no money available to conduct such work in a systematic way until recently. In May, 1914, the Smith-Lever Act was passed by Congress providing $10,000 annually to each state beginning with July 1, 1914, to be used for agricultural extension work by the State Colleges of Agriculture in co-operation with the United States Department of Agriculture. The act also provides that beginning with July 1, 1915, additional amounts which increase from year to year are to be given to the different states upon the condition that the states appropriate equal amounts to be used in connection with the national fund for extension work.

Sources of Income.—A joint resolution passed by the legislature of 1890 accepted the lands granted in the enabling act. These lands were not at once assigned. The commissioner of

*See the index for references to additional information concerning the Agricultural Experiment Station and the Extension Division.

Public Lands reported that 64,658 acres had been selected. All have since been selected; very few have been sold. A small amount is received yearly as rental. The first income recorded was $1,197.71, September 1, 1896. As no school lands may be sold for less than ten dollars an acre, these lands, when sold, will probably yield an endowment of two million dollars, the interest from which will probably be sufficient for the needs of the college.

The Morrill Act passed by Congress in 1890 provides a yearly appropriation for "the more complete endowment and support of colleges for the benefit of agriculture and mechanic arts." Under this act the College now receives from the general government the sum of $25,000 per annum.

An act making appropriation for the Department of Agriculture, approved by Congress March 4, 1907, provides for the further endowment and support of these colleges. The bill, which was introduced by Senator Knute Nelson of Minnesota, stipulates that the expenditure of the fund shall be governed in all respects by the provisions of the Morrill Act, and also that a portion of the money may be used to provide for the training of instructors in agriculture and mechanic arts. This act made an appropriation of $5,000 for the year 1907-1908, which increased $5,000 each year until it reached $25,000 per annum. The College, therefore, receives $50,000 annually from the National Government for instructional purposes.

The College also receives aid from the State, biennial appropriations being made by the legislature for maintenance and buildings.

The Hatch Act provides that the experiment stations should receive $15,000 annually from the National Government. This amount has been increased by the provisions of the Adams Act of 1906, so that the experiment station now receives $30,000 a year for maintenance.

Under the Smith-Lever Act the College receives $10,000 annually from the National Government for extension work. Under the same act during the next two years the College will receive $38,030 in addition, on the condition that an equal amount is provided by the state to be used with the national

fund. The State Legislature of 1917 has appropriated $68,000 to meet this condition and for additional extension work in the State.

LOCATION, BUILDINGS AND EQUIPMENT

The Location.—The College is located upon an eminence one mile from the business center of Brookings, which has a population of about three thousand five hundred people. The city is situated on the Central Dakota Division of the Chicago and North-Western Railway, the Watertown branch making connection with the main line at this point.

Brookings is almost an ideal college town. It is lighted by electricity and has a complete water and sewer system. Its streets are lined with trees and its houses have well kept lawns abounding in ornamental shrubs and plants.

It is a city of clean morals. No saloon has been allowed within its limits for years; and the last few times when the question of allowing saloons within the city has been submitted to a vote of the people, it has been defeated by overwhelming majorities.

The College Buildings and Grounds.—The college campus upon and about which the college buildings are placed is beautifully located on an eminence within the corporate limits of Brookings. It is ornamented with choice and tasteful varieties of trees and shrubs and laid out with necessary walks and drives. Adjoining on the rear are the horticultural gardens, and to the north and northwest is the college farm.

The oldest building on the campus, called the Central Building, was erected in 1884. This and the other two old buildings, called, during recent years, the North Building and the Experiment Station Building, will in the future be given over to general class room and laboratory purposes.

The Agricultural and Administration Building provides executive offices, an auditorium, laboratories, class rooms and offices for the various agricultural departments.

The Physics-Engineering Building is occupied by the physics and the engineering departments with their various class rooms, laboratories and shops.

The Plant Breeding Building, together with the large Greenhouse, furnishes room for the work that is being conducted by the departments of botany, horticulture and entomology.

The Chemistry-Pharmacy Building, a two-story structure, is occupied by the class rooms and laboratories of those departments.

The Creamery is a two-story building which was almost doubled in size in 1911 by an addition which was made to meet the growing demands upon this department.

The Gymnasium is a two-story building that is used for athletic exercises and military drill during the season when such work cannot be carried on outdoors. In connection with the Gymnasium a tract of land near the campus has been fitted up for outdoor exercises and sports.

Wenona Hall, a splendid brick dormitory for young ladies, stands on a site just across the street from the campus. It will accommodate about sixty women.

Wecota Hall, the new dormitory for young women, has been completed during the year. This building cost $75,000, and will provide rooms for about one hundred twenty ladies.

The central heating and electric light plant occupies a brick structure in the rear of the campus. The buildings are all heated by steam and lighted by electricity generated in this plant.

Near the campus on the adjoining college farm are located the agricultural and the dairy barns, together with a number of smaller buildings which are devoted to agricultural purposes.

The legislature of 1917 appropriated $100,000 to complete the Agricultural Hall, $80,000 for an armory, and $20,000 for a livestock pavilion. The erection of these buildings will begin during the summer of 1917.

The Farm and Horticultural Gardens.—The college farm includes four hundred and sixty acres, about sixty acres of which are used by the Agricultural Experiment Station as an experimental farm. Here the field experiments with field crops, seed germination and soil preparation are conducted, and the students may witness and actually participate in this scientific

work. The remainder of the farm is used as a model stock and dairy farm under the direction of the professor of animal husbandry. Practical work in experiments involving the best farming practices for this region are given the students.

The Horticultural Gardens comprise about fifty acres adjoining the campus. Here and in the Greenhouse a large amount of work in fruit propagation and plant experimentation is being carried on.

The Laboratories, Shops and Museums.—Well fitted laboratories and shops have been provided in all those departments where their use is made necessary by modern educational methods. The value of illustrative materials has been recognized, and numerous departments have made large collections and museums. The equipment of the various departments is described in connection with their work.

The Library and Reading Room.—The library, occupying rooms on the first floor of the Central Building, contains over 19,000 bound volumes and about 6,000 pamphlets. The institution is a repository for the government and contains a set of government publications dating from 1886. Many of the more valuable sets have been extended to an earlier date. Care has been exercised in the selection of books, in order that each department may have proper reference books at the disposal of the students. The books are arranged according to the Dewey system of classification and are completely catalogued in the card catalogue. The library also receives the cards from the government cataloguing the bulletins of the experiment stations and the publications of the United States Department of Agriculture. The files of many standard scientific and literary periodicals are kept bound. The reading room is abundantly supplied with current periodicals and newspapers. The library is open nearly all the time, day and evening, and at the disposal of students for the purpose of study and reading. Someone is in charge at all times to give help and information to those using the library.

The Postal Facilities.—The College furnishes first-class postal facilities, the mail of the students being delivered at the college at convenient times during the day, making it unnecessary for them to walk to the city postoffice.

ORGANIZATION AND GOVERNMENT

The Board of Regents.—By an act of the legislature approved March 10, 1897, provision was made for the appointment of the Regents of Education, who have charge of all of the educational institutions which are maintained either wholly or in part by the state. The terms of office of the regents are each six years and expire at different times, so that the board is a continuous body. Appointments to the board are made by the Governor, with the approval of the senate, "of persons of probity and wisdom from among the best and best known citizens, residents of different portions of the state, none of whom shall reside in the counties in which any of the state educational institutions are located, who shall be designated as the Regents of Education."

Among the powers and duties of the regents as defined by law some important ones are, to employ members of the different faculties and other agents, to determine the proper number of teachers in said faculties, also their compensation and terms of employment, to establish departments, to settle upon courses of study, to determine the rules to be enacted for the government of students, to decide upon text books to be used, to fix tuition fees, to guard against unwise duplication of departments, to confer degrees, to control the Agricultural Experiment Station, and to promote education among the farmers by providing for institutes; in fact, to make all regulations as to the executive and instructional functions of the educational institutions of the state. The regents govern the College largely through a regents' committee.

The Faculty.—The faculty, consisting of the president and professors, all of whom are elected by the regents, determines in large part the general policy of the College. The professors are heads of the different departments of instruction which they represent and are responsible to the president, who is in charge of all matters of administration. The president, in turn, is responsible to the regents for the whole work of the institution. The president appoints, at the beginning of each col-

lege year, certain faculty committees which take up such work as may be assigned them by the president and faculty.

In the government of the College the faculty relies chiefly upon the sense of duty of the students. The student is expected to pursue his studies with diligence, to attend classes regularly and maintain good behavior at all times. Students are not only under the direct supervision of the faculty while on the campus, but are responsible for their conduct wherever they may be.

In order that the work of the College may be rendered as efficient as possible and all relations made harmonious, a set of regulations, chiefly governing matters of classification, has been adopted by the faculty. No set rules are expected to cover every condition that arises, and all students should recognize the importance of co-operation with the faculty in their efforts to make college life helpful to the student body as a whole.

STUDENT ACTIVITIES

Faculty Control.—While the students are allowed wide latitude in carrying on affairs which vitally concern themselves, such as athletic, literary, musical, social and other activities, the faculty retains an advisory interest in all such matters, and has the right at any time to pass reasonable regulations for the welfare of the College.

The Student Association.—The athletic, debating and oratorical interests, and the student publication, the Industrial Collegian, are under the control of the Student Association, which governs these activities by means of a board of control, consisting of students and members of the faculty. This board is organized into the Athletic, the Collegian, and the Debating Councils, each of which directs the respective interests that come under it. A fee of three dollars a semester, or proportional sums for students whose work is arranged in terms shorter than the semester, is charged for membership, which admits the holder to all student exercises under the supervision of the association and pays for a subscription to the Collegian.

Athletics.—Under the auspices of the local organization and a number of college athletic associations of the state, all kinds of athletic sports are practiced and encouraged. Students should understand, however, that their studies must receive the first consideration; and that the purpose of athletic exercises is to develop gentlemanly and ladylike qualities in those who participate in them.

Oratory and Debating.—Each year for a number of years representatives of the college have met students from other institutions in debating contests. The members of the local teams are chosen in a series of preliminary contests in which all are encouraged to take part. There has thus been aroused among the student body a large interest in this kind of work and a healthy rivalry to obtain places on the intercollegiate teams.

Credit for three hours work during one semester is given those who take part in an intercollegiate debate.

A representative of the college is sent each year to the intercollegiate oratorical contest of the state. This student is selected by means of a local preliminary contest. In order that this contestant may fully represent the college, the faculty has imposed the requirement that those competing for this honor must be pursuing regular work for the Bachelor's degree.

In order further to encourage students to enter into these activities, the First National Bank of Brookings, the Farmers' National Bank and the Bank of Brookings have very generously offered cash prizes to be awarded to students who excel along the various lines of forensic work.

The Student Publications.—The Industrial Collegian is a weekly paper published by the students of the College. It is intended to be a mirror of student life at this institution, and all phases of college activity have representatives on its staff of editors.

The Jack Rabbit is published annually by the junior class, and is a good representative and exponent of college life.

The Literary Societies.—The literary society is an important factor in the education of the student and all are strongly advised to take part in this kind of work. All preparatory students are expected to become members of the Franklin

Society whose work is carried on under the supervision of the preparatory department, and is a preparation for the college societies.

The faculty and various citizens, recognizing the value of literary society work, have contributed several trophies to be competed for by the Athenian, Miltonian and Delphian Societies, which are composed of students of collegiate standing.

The Christian Associations.—In the state schools the Young Men's and Young Women's Christian Associations occupy unique positions. They are the only organizations whose primary object is the moral development of the student body. Their platforms are broad enough to allow every student who stands for pure manhood and womanhood to affiliate himself or herself with them. The purpose of the associations is to present the value of Christian living to the student and to the state, and to create an atmosphere of good-fellowship among the members of the student body. Each association is represented by a local secretary and also by state and international college secretaries.

Other Student Organizations.—Among these may be mentioned the Art Club which encourages interest in art by bringing exhibits to the College and in various other ways; the chorus, orchestra, and band, which give a series of musical entertainments during the year; the Agricultural Club, the Engineering Club, the Pharmacy Club and other organizations which promote interest along the various lines of college work.

STUDENT EXPENSES

Tuition and Other Fees.—The tuition for regular work extending throughout the college year is six dollars per semester, or twelve dollars per year. For information concerning tuition fees for work that is not arranged according to semesters, see the respective courses. A student who enrolls must pay the full tuition for the semester or term. A laboratory fee of two dollars per semester is charged for the use of each laboratory in which the student takes work. Books and other supplies are furnished by the student.

As an inducement to students to register promptly the

Regents have imposed the rule that a tardy enrollment fee of twenty-five cents per day shall be collected of all students who enroll subsequent to the regular day announced for that purpose. However in no case shall the tardy enrollment fee exceed one dollar and fifty cents.

Special fees are charged for instruction in music in the College. (See the department of music.)

By action of the regents the tuition and incidental fees and laboratory fees, after having been paid, will in no case be refunded; but music, dormitory and other fees may be refunded at the discretion of the president of the College, if the student is called away before the end of the term or semester by unavoidable causes.

Estimate of Expenses.—An estimate of the yearly expenses of a student is as follows:

Board and room	$200.00
Tuition	12.00
Fees in Student Association	6.00
Laboratory fees	10.00
Books and Supplies	25.00
Laundry Expenses	20.00
Incidentals	25.00
	$298.00

Men students are expected to purchase military uniforms which range in cost from $16.00 to $18.00.

While the above is considered as a reasonable estimate, many students go through the year on a less amount. Much depends upon the character of the student and the work he is taking.

Board and Rooms.—Good rooms and board can be obtained at private houses. The dormitories provide a large number of the young ladies with comfortable homes at reasonable rates. (See the following page for dormitory regulations.) Every effort is made by the officers of the institution to secure suitable and satisfactory boarding places for students. A list of approved available places for boarding or rooming can be obtained at any time from the President of the College. The Christian

Associations make it a point at all times to assist new students in finding proper living accommodations. If prospective students will write to the Young Men's Christian Association or the Young Women's Christian Association of the College, officers of these organizations will be glad to arrange to meet them at the train and help them to secure boarding and rooming places.

The Ladies Dormitories.—The two dormitories, Wenona Hall and Wecota Hall, the latter of which has just been completed, will accommodate about one hundred seventy-five young women. The halls are under the immediate supervision of a preceptress who does everything possible to make a real home for those who live there. The young women are given a large share in the government of the halls, and are thus encouraged to form orderly habits and high ideals of conduct.

Precautions have been taken to reduce danger from fire to a minimum. The buildings are heated with steam, lighted by electricity, and in every respect have the latest improvements and conveniences. Bath rooms, toilet rooms and lavatories are on each floor. In addition, each room is provided with a large closet, and a stationary wash stand with hot and cold water.

Each room is provided with two single cots or beds with mattresses and pillows, two straight chairs, study table, dresser with mirror, rug and window shades. Bedding, towels and other articles must be provided by the students. Each girl should provide herself with mattress pad, two pairs of pillow cases, three sheets, two pairs of blankets, napkin ring, six towels and a clothes bag.

The cost of rooms in the halls is $13.50 per semester for each occupant, two in a room. This fee includes both light and heat. The room rent is payable in advance. The occupants will be expected to take care of their own room.

A student desiring room reserved for her must forward $2.00 with her application. This will apply on the regular room rent for the semester. In no case will this advance payment be refunded after September first.

In connection with the dormitories, a large dining hall which will accommodate about four hundred people, is to be conducted hereafter not only for the young women who room here, but also for the benefit of other students, both young

women and young men, who room elsewhere. The cost of table board will thus be reduced to a minimum. During the past two years this has ranged from $3.00 to $3.50 a week. Owing to the unsettled conditions at the present time it is impossible to state what the cost of board will be during the next year. However, the dining hall will be conducted so as to provide wholesome fare at minimum cost. Young ladies living in the dormitories may have a limited amount of laundry done at a slight additional expense.

Payment for board in the dining hall must be made for four weeks in advance, and no deduction will be made for less than one week's absence.

Student Labor.—There is a limited amount of paid labor about the institution which can be done by students and it is the policy of the College authorities to give as much work to deserving students as is consistent with the best interests of all. However, no one should expect to earn his entire expenses while at college.

Scholarships.—The following articles from the law, defining the powers and duties of the regents of education, is self-explanatory: "The Regents of Education shall fix all rates of tuition and other fees to be paid by students, but such rates must be the same in all different institutions. They may receive free of tuition two students appointed by each senator and one by each representative of the state legislature in any one of the institutions under their control, provided that the period for which appointment is made shall expire with the term of office of said senator or representative and provided that such appointees shall comply with all the rules and requirements of the institution which they desire to enter. No student, however, shall receive any other gratuity whatever." The regents of education make this article operative in the case of this institution. The student must present his appointment to the secretary of the College at the time of enrollment in order to obtain credit for the same.

ENTRANCE REQUIREMENTS

Admission.—While students are admitted at any time and assigned to such classes as they are found best fitted to enter, it is much better to commence at the beginning of the college year. No reduction in college fees is made when the student enters after the beginning of the term, and if a student enters late he will not under any condition be allowed to hold a class back. See paragraph concerning tuition for statement concerning tardy enrollment fee. If a tardy beginning is imperative the student must arrange with a tutor for assistance in bringing up his work, in order that he may go on understandingly and without hindrance to the class.

Candidates for admission to any department of the College must be at least fourteen years of age and of good moral character.

Credit in the College may be obtained by presenting certified grades from other institutions of reputable standing or through examination. The College reserves the right, however, to cancel grades accepted from other schools should the student be found deficient in the subject for which he has received credit.

The College will furnish prospective students with application blanks, which, after being filled out with certified standings and other data, should be returned to the registrar.

The first two days of the first semester are devoted to the registration of students. All students should complete their registration at this time and new students must present their credits at or before this time if they expect to be assigned a proper classification.

Entrance Credits.—For admission to the four-years courses leading to the degree of Bachelor of Science, and the two-years course in Pharmacy the student should present credit for fifteen units of high school or other secondary school work. A unit is a subject which is taught five periods a week

throughout the school year, or the equivalent of this work. Of the fifteen units required, some are prescribed, the remaining units being in optional subjects as indicated in the table below. A student who has graduated from a creditable high school course of four years will in general be enrolled as a member of the freshman class, but in case the prescribed subjects have not been completed, he may be required to bring up this back work.

A student may be admitted to a college class without having passed in one or two of his entrance studies. These shall stand against him and must be cleared up within one year after entrance or the student will be required to take the subjects with the regular classes.

For the benefit of students who are unable to attend a high school to complete the preparatory requirements, a preparatory course is maintained. Students will not be admitted to this department unless they present evidence that they have completed the work of the public schools as far as the ninth grade. For the preparatory course, see the Preparatory Department.

The list of prescribed and optional subjects are as follows:

Prescribed Units

English, three units in advance of grammar. These should consist of composition work and a study of some of the simpler American and English classics.

Algebra, one and one-half units for engineering students, one unit for others. The fundamental operations, factoring, fractions, simple equations, involution, evolution, radicals, quadratic equations and the analysis and solutions of problems involving these principles.

Plane Geometry, one unit. The completion of plane geometry. Special emphasis should be paid to the solutions of

original problems and constructions. Students of engineering who have not completed solid geometry in the high school will be required to take the subject in the freshman year of the college course.

Elementary Physics, one unit. One year's work covering the science as presented in the best text books. Laboratory work should accompany the text book work.

History, one and one-half units. This work should follow, and not include, elementary United States History, and should be a connected study of some of the following lines: ancient, medieval, modern, English, American history.

Civics, one-half unit. A study of the constitutions of the United States and of the state, as presented in the best high schools.

Foreign Language, two units. These credits should be for two years' work in either German, French or Latin. In case a student is a graduate of a four-years high school course which does not include any foreign language, he may present other entrance credits in place of these two units, but must take foreign language in the freshman and sophomore years if such work is required in the course which he wishes to pursue.

Optional Units

The three and one-half optional units may be offered in the same lines of work as the prescribed units and in other departments, as indicated by the table below. About the only requirement made concerning the work for which credit is offered is that it should be of a reasonably high standard. The maximum credit that is allowed in each subject is indicated in the table. While no minimum is stated it is expected that a student shall have covered a reasonable amount of a subject before being given any credit in it.

TABLE OF ENTRANCE REQUIREMENTS

	Prescribed Units	Maximum Allowed
English	3	3
*Algebra, thru quadratics	1	2
Plane Geometry	1	1
Elementary Physics	1	1
History, following elementary U. S. History	1½	3
*Foreign Language, German, French or Latin	2	4
Civics	½	½
Science—		
Agriculture	.....	1
Physiology, following Biology, Zoology or Botany	.....	½
Botany	.....	1
General Biology	.....	1
Zoology	.....	1
Geology	.....	½
Physical Geography	.....	½
Bookkeeping	.....	½
Commercial Geography	.....	½
Freehand Drawing	.....	½
Manual Training, including Mechanical Drawing	.....	1
Cooking	.....	½
Sewing	.....	½
*Solid Geometry	.....	½

*See above for exceptions as to algebra, solid geometry and foreign language.

STUDIES

Credits.—Credit for college work is counted in credit hours. A credit hour is one hour of class or lecture work requiring an additional hour and a half in preparation. Two and one-half hours in laboratory work is counted equivalent to one hour spent in the class room.

Registration.—In registering for work the student is advised by a member of the faculty who helps him to make out a consistent schedule of studies. In general, students are not

allowed to classify in more than twenty or less than fourteen credit hours a week. The faculty recognize that, because of differences in subjects and in the ability of students, some are able to carry a larger number of hours than others, and endeavor to assign to each student enough work to keep him reasonably busy without overloading him.

Special Students.—Students of mature years who have passed in the work of the preparatory department may be allowed to pursue special studies if not candidates for a degree, but they must satisfy the faculty that they are qualified to take up the studies desired.

Military Requirements.—The national law organizing and endowing these agricultural colleges requires that military science shall form part of the instruction offered. All male students below the junior year are required to take military drill three times a week unless excused because of physical disability or for some other reason. Certificates of disability should be obtained from the physician whom the College authorities have designated for such work, the College bearing the expense of the examination.

According to the Federal law creating the Reserve Officers Training Corps, of which the College has accepted the provisions, juniors and seniors may elect military science during the remainder of their course, and thus receive their clothing and board from the National Government. For further regulations governing this work see the military department.

Grades.—All grades of students are reported to the registrar by means of the letters, M, S, E. I, P, and F. The letter M means that the student's work is of medium or average grade. The letter S, meaning superior, indicates that the work is above the average, but is not as high as E, which means that the student's work is excellent or so high above the average as to merit special mention. The letter I means inferior or below the average, but is higher than P, meaning passed, which indicates that the student has only a sufficient knowledge to make it unprofitable for him to repeat the subject. The letter F means that the student has failed to receive a passing grade.

Conditioned Students.—Any student who without good reason has failed to receive a passing grade in a reasonable amount of his work will be registered only conditionally for further work. And if any student at any time is not carrying the work in which he is classified at a passing grade, or fails to perform other duties which may be expected of him, he may be placed upon the conditioned list and thus debarred from certain student privileges.

Absences.—Students are expected to attend regularly all the exercises of the classes to which they are assigned. When a student finds it necessary to be absent he should get an excuse in advance, if possible. Otherwise he should present an excuse to the committee having this matter in charge at the time and place they may designate. Excuses will be granted only when the absence seems necessary, and such penalties will be imposed upon students for unexcused absences as the faculty may deem proper. Should a student find it necessary to be late to his class he should make a satisfactory explanation to his instructor at the close of the period.

Extra credits will be required of students for absences from college duties, whether the absences are excused or not, unless the students are absent officially representing the College. While the faculty will do all that is reasonably possible to assist students to bring up work which has been missed because of sickness or for other good reasons, they recognize the principle that even a good excuse should not stand in lieu of scholarship.

DEGREES AND CERTIFICATES

Degrees.—The courses of study leading to degrees given by the College are as follows:

The two years course in Pharamacy, leading to the degree of Pharmacy Graduate. For additional work of two years leading to the degree of Bachelor of Science, see schedule of Pharmacy Course.

The four-years course in Agriculture, in which the student may specialize along the lines of animal husbandy, dairy husbandry, agronomy, horticulture and plant pathology. Upon the completion of one of these schemes, under the direction of

the head of the department in which the group of electives is chosen, the student will receive the degree of Bachelor of Science.

The four-years course in Home Economics leading to the degree of Bachelor of Science.

The four-years courses in Mechanical, Electrical and Civil Engineering, leading to the degree of Bachelor of Science. In order to meet a constantly increasing demand for better equipped and more thoroughly trained men along the several lines of engineering activities, an additional fifth year course of study is offered in the three engineering departments. Upon the completion of this additional year's work, the advanced degree, Mechanical Engineer, Electrical Engineer or Civil Engineer, will be conferred. This work, which is nearly all prescribed, is a continuation of the work pursued in the undergraduate courses, and is intended more fully to equip the student with special training along the particular line of work which he desires to pursue after leaving college.

The four-years course in General Science, leading to the degree of Bachelor of Science. The work of this course is largely elective and is planned to give the student a liberal education, at the same time permitting specialization in the sciences.

The degree of Master of Science is offered to students who have received the Bachelor's degree either from this institution or from other institutions of equal rank, and who in addition have completed at least one full year's resident work, i. e., thirty-six credit hours, in advanced study and have shown a reasonable proficiency in such work. At least two-thirds of this work must be in some one line of study, called the major work. The scheme of study presented by the student for the degree must be prescribed by the faculty committee on advanced degrees, who will outline the work in consultation with the head of the department in which the major work is taken.

It should be understood that the work for this degree can not be subjected to rigid regulation, and that each case must be dealt with on its individual merits.

Owing to the great demand for county agricultural agents and extension workers the College will give instruction along

these lines to a limited number of graduates in Agriculture. Such persons should show some special fitness for the work they wish to take up. The instruction will consist of lectures on extension history, methods of conducting extension work, legislation, and other topics; the assisting of county agents and the carrying out of projects. The work will be varied according to the line that the student wishes to pursue. This work will be carried on in connection with the agricultural department of the College and may be applied towards completing the requirements for the degree of Master of Science.

Special Courses.—The College also offers special courses in several important and practical lines of work. These are mentioned in other parts of the catalog under the proper headings, and are as follows:

The four-years course in the School of Agriculture.
The one-year secretarial course.
The five-months course in steam engineering.
The three-months creamery course.
Courses in vocal and instrumental music.
Special work in art.
The farm and home course, for farmers and farmers' wives.

Courses of Study.—The courses leading to the degree of Bachelor of Science and the degree of Pharmacy Graduate are outlined on the following pages. The conditions for entrance to these courses may be found under "Entrance Requirements." A department will not be required to give an elective unless at least five students are enrolled in the subject.

AGRICULTURAL COURSE

Freshman Year

	Credits	
	1st Sem.	2nd Sem.
Rhetoric, English 9 & 10	3	3
El. Chemistry, Chemistry 1 & 2	4	4
Grain and Root Crops, Agronomy 1.	4	
Stock Judging, Animal Husbandry 1	3	
Military Tactics	1	1
German 1 & 2, or French 1 & 2, or Spanish 1 & 2	4	4
Farm Dairying, Dairy Husbandry 1		3
Breeds of Live Stock, Animal Husbandry 2		3

	Credits 1st Sem.	2nd Sem.
Sophomore Year		
General Botany, Botany 2 & 3	4	4
Quantitative Chemistry, Chemistry 3		3
Veterinary Anatomy, Veterinary 1		2
Military Tactics	1	1
German 3 & 4, or French 3 & 4, or Spanish 3 & 4	4	4
Organic Chemistry, Chemistry 11	4	
General Entomology, Entomology 3 & 4	2	3
General Horticulture, Horticulture 1 & 2	1	1
English Literature, English 17	3	

ANIMAL HUSBANDRY GROUP

Junior Year		
General Zoology, Zoology 3 & 4	4	4
Psychology, Education 1	3	
Extempore Speaking, Public Speaking 3	2	
Animal Nutrition, Animal Husbandry 6	3	
Soils, Agronomy 4 & 5	4	4
Stock Feeding, Animal Husbandry 6		3
Principles Animal Breeding, Animal Husbandry 4		3
Elective	2	4
Senior Year		
Economics, History 15	3	
Adv. Stock Judging, Animal Husbandry 3	2	
Veterinary Hygiene & Sanitation, Veterinary 2	2	
Live Stock Production & Management, An. Husb. 7		4
Agricultural Chemistry, Chemistry 6		3
Rural Economics, History 18		3
Veterinary Medicine, Veterinary 3		3
Elective	11	5

DAIRY HUSBANDRY GROUP

Junior Year		
General Zoology, Zoology 3 & 4	4	4
Soils, Agronomy 4 & 5	4	4
Inspection & Testing Dairy Products, Dy. Husb. 2	4	
General Bacteriology, Zoology 10	4	
Extempore Speaking, Public Speaking 3	2	
Dairy Bacteriology, Dairy Husbandry 3		4
Dairy Technology, Dairy Husbandry 7		4
Elective		2

	Credits 1st Sem.	2nd Sem.
Senior Year		
Factory Operation, Dairy Husbandry 4 & 5	4	4
Dairy Management, Dairy Husbandry 6	3	
Economics, History 15	3	
Psychology, Education 1	3	
Principles Animal Breeding, An Husb. 4		3
Rural Economics, History 18		3
Elective	5	9

AGRONOMY GROUP

Junior Year		
General Zoology, Zoology 3 & 4	4	4
Soils, Agronomy 4 & 5	4	4
Psychology, Education 1	3	
Crop Breeding, Agronomy 2		3
Field Management, Agronomy 3		2
Extempore Speaking, Public Speaking 3	2	
Elective	5	6
Senior Year		
Economics, History 15	3	
Geology, Agronomy 10	5	
Rural Economics, History 18		3
Heredity, Botany 10		3
Elective	10	12

HORTICULTURE & PLANT PATHOLOGY GROUP

Junior Year		
General Zoology, Zoology 3 & 4	4	4
Soils, Agronomy 4 & 5	4	4
Extempore Speaking, Public Speaking 3	2	
Plant Pathology, Botany 5	4	
Plant Materials, Horticulture 8		1
Heredity, Botany 10		3
Systematic Pomology, Horticulture 5	2	
Plant Physiology, Botany 4		4
Elective	3	3
Senior Year		
Economics, History 15	3	
Psychology, Education 1	3	
Forestry, Horticulture 4	2	
Economic Entomology, Entomology 5 & 6	3	3
Industrial Publicity, Commerce 15	2	

	Credits 1st Sem.	2nd Sem.
Architectural Drawing, Mech. Engineering 6 ...	3	
Nursery Management, Horticulture 9 & 10	4	4
Landscape Gardening, Horticulture 6		4
Rural Economics, History 18		3
Sociology, History 16		3
Experimental Horticulture, Horticulture 11 ...		2

HOME ECONOMICS COURSE

Freshman Year

Rhetoric, English 9 & 10	3	3
Drawing, Art 14 & 15	2	2
Elementary Chemistry, Chemistry 1 & 2	4	4
French 1 & 2, or German 1 & 2, or Spanish 1 & 2	4	4
Household Physics, Physics 9	3	
Hygiene, Home Economics 3	1	
Plain Sewing, Home Economics 10	2	
Textiles, Home Economics 11		3
Food Preparation, Home Economics 4		3

Sophomore Year

English Literature, English 11 & 12	3	3
Organic Chemistry, Chemistry 11	4	
General Botany, Botany 2 & 3	4	4
French 3 & 4, or German 3 & 4, or Spanish 3 & 4	4	4
Dressmaking, Home Economics 12		3
Food Preparation, Home Economics 5	4	
Chemistry of Foods, Chemistry 4		4

Junior Year

Modern History, History 7 & 8	3	3
Bacteriology, Zoology 10	4	
General Zoology, Zoology 3 & 4	4	4
Psychology, Education 1	3	
Adv. Dressmaking, Home Economics 13	3	
English Literature, English 13 & 14	2	2
Dietetics, Home Economics 6		4
Applied Design, Art 4 & 5	2	2
Extempore Speaking, Public Speaking 3a		2
Elective		3

Senior Year

Economics, History 15	3	
Art History, Art 6 & 7	2	2
Theory of Design, Art 3	2	
Home Nursing and Sanitation, Home Econ. 8 ..		3

	Credits 1st Sem.	2nd Sem.
Special Problems in Cookery, Home Econ. 7 ..	4	
*Theory of Teaching Home Economics, H. Econ. 14		3
Household Management, Home Economics 9 ..	3	
Sociology, History 16		3
Elective	4	7

*Required only of those who expect to teach Home Economics.

MECHANICAL ENGINEERING

Freshman Year

Rhetoric, English 9 & 10	3	3
College Algebra, Mathematics 8	3	
Trigonometry, Mathematics 9 & 10	2	2
Elementary Chemistry 1 & 2	4	4
Extempore Speaking, Public Speaking 5 & 6 ...	2	2
Mechanical Drawing, Mechanical Engineering 5	3	
Military Tactics	1	1
Forging, Mechanical Engineering 2	1	
Machine Shop, Mechanical Engineering 3		2
Plane Surveying, Civil Engineering 1		2
Elementary Mechanics, Mathematics 16		2

Sophomore Year

Analytic Geometry, Mathematics 11	5	
General Physics, Physics 3 & 4	5	5
English Literature, English 17 & 18	3	3
Machine Shop, Mechanical Engineering 4	3	
Calculus, Mathematics 12		5
Descriptive Geometry, Mechanical Engineering 7	2	
Machine Design, Mechanical Engineering 8		3
General Astronomy, Mathematics 15		3
Military Tactics	1	1

Junior Year

Machine Design, Mechanical Engineering 9	2	
Elements of Mechanism, Mechanical Engineer. 10	3	
Electricity & Magnetism, Electrical Engineer. 1	4	
Hydraulics, Civil Engineering 5	3	
Calculus & Analytic Mechanics, Mathematics 13 & 14	5	3
Graphic Statics, Civil Engineering 3	2	
Steam Engines & Thermodynamics, Mechanical Engineering 12		5
Mechanics of Materials, Mechanical Engineer. 15		5

Note—Students expecting to teach should see Education Department.

	Credits 1st Sem.	2nd Sem.
Electrical Measurements, Electrical Engineer. 2		1
Alternating Currents, Electrical Engineering 3		5
Senior Year		
Masonry & Foundations, Mech. Engineering 25	2	
Experimental Engineering, Mech. Eng. 16 & 17	3	4
Steam Boilers, Mech. Engineering 13	2	
Engineering Design, Mech. Engineering 19	4	
Highway Construction or Irrigation, Civil Engineering 4 or 11	2	
Economics, History 15	3	
Structural Design, Mech. Engineering 21		4
Contracts & Specifications, Civil Engineering 13		2
Reinforced Concrete, Civil Engineering 14		3
Gas & Oil Engines, Mech. Engineering 11		2
Elective	2	2
ELECTRICAL ENGINEERING		
Freshman Year		
Rhetoric, English 9 & 10	3	3
College Algebra, Mathematics 8	3	
Trignometry, Mathematics 9 & 10	2	2
Elementary Mechanics, Mathematics 16		2
Elementary Chemistry, Chemistry 1 & 2	4	4
Extempore Speaking, Public Speaking 5 & 6	2	2
Mechanical Drawing, Mech. Engineering 5	3	
Military Tactics	1	1
Forging, Mechanical Engineering 2	1	
Machine Shop, Mech. Engineering 3		2
Plane Surveying, Civil Engineering 1		2
Sophomore Year		
Analytic Geometry, Mathematics 11	5	
General Physics, Physics 3 & 4	5	5
English Literature, English 17 & 18	3	3
Machine Shop, Mech. Engineering 4	3	
Calculus, Mathematics 12		5
General Astronomy, Mathematics 15		3
Descriptive Geometry, Mech. Engineering 7	2	
Machine Design, Mechanical Engineering 8		3
Military Tactics	1	1
Junior Year		
Electricity and Magnetism, Elec. Engineering 1	4	
Machine Design, Mech. Engineering 9	2	
Elements of Mechanism, Mech. Engineering 10	3	

	Credits 1st Sem.	2nd Sem.
Hydraulics, Civil Engineering 5	3	
Calculus & Analytic Mechanics, Mathematics 13 & 14	5	3
Graphic Statics, Civil Engineering 3	2	
Electrical Measurements, Elec. Engineering 2		1
Steam Engines & Thermodynamics, Mechanical Engineering 12		5
Mechanics of Materials, Mech. Engineering 15		5
Dynamo Electric Machinery, Elec. Engineer. 4		5
Senior Year		
Alternating Currents, Elec. Engineering 5	5	
Dynamo Design, Electrical Engineering 6	3	
Masonry & Foundations, Mech. Engineering 25	2	
Steam Boilers, Mech. Engineering 13	2	
Experimental Engineering, Mech. Eng. 16 & 17	3	4
Economics, History 15	3	
Electric Light & Power Distribution, Electrical Engineering 7		5
Reinforced Concrete, Civil Engineering 14		3
Contracts & Specifications, Civil Engineering 13		2
Gas & Oil Engines, Mechanical Engineering 11		2
Elective		2
CIVIL ENGINEERING		
Freshman Year		
Rhetoric, English 9 & 10	3	3
College Algebra, Mathematics 8	3	
Trigonometry, Mathematics 9 & 10	2	2
Elementary Chemistry, Chemistry 1 & 2	4	4
Extempore Speaking, Public Speaking 5 & 6	2	2
Mechanical Drawing, Mechanical Engineering 5	3	
Military Tactics	1	1
Forging, Mechanical Engineering 2	1	
Machine Shop, Mechanical Engineering 3		2
Plane Surveying, Civil Engineering 1		2
Elementary Mechanics, Mathematics 16		2
Sophomore Year		
Analytic Geometry, Mathematics 11	5	
General Physics, Physics 3 & 4	5	5
English Literature, English 17 & 18	3	3
Plane Topographical Surveying, Civil Eng. 2	4	

Note—Students expecting to teach should see Education Department.

	Credits 1st Sem.	2nd Sem.
Military Tactics	1	1
Descriptive Geometry, Mechanical Engineering 7	2	
Calculus, Mathematics 12		5
Machine Design, Mechanical Engineering 8		3
General Astronomy, Mathematics 15		3
Junior Year		
Calculus and Analytic Mechanics, Mathematics 13 & 14	5	3
Electricity and Magnetism, Elec. Engineer. 1	4	
Elements of Mechanism, Mech. Engineering 10	3	
Hydraulics, Civil Engineering 5	3	
Graphic Statics, Civil Engineering 3	2	
Highway Construction or Irrigation, Civil Engineering 4 or 11	2	
Steam Engines & Thermodynamics, Mech. Eng. 12		5
Mechanics of Materials, Mechanical Eng. 15		5
Stresses, Civil Engineering 6		4
Railroad Surveying or Sanitary Engineering, Civil Engineering 7 or 15		3
Senior Year		
Economics, History 15	3	
Geology, Agronomy 10 or Bacteriology, Zoology 10	5 or 4	
Structural Details, Civil Engineering 8	2	
Structural Steel Design, Civil Engineering 9	3	
Masonry & Foundations, Mech. Engineering 25	2	
Experimental Engineering, Mech. Engineering 16 & 17	3	4
Irrigation or Highway Construction, Civil Engineering 11 or 4	2	
Contracts and Specifications, Civil Engineer. 13		2
Bridges and Dams, Civil Engineering 12		4
Reinforced Concrete, Civil Engineering 14		3
Railroad Surveying or Sanitary Engineering, Civil Engineering 7 or 15		3
Elective		2

GENERAL SCIENCE COURSES

Freshman Year

Rhetoric, English 9 & 10	3	3
Elementary Chemistry, Chemistry 1 & 2	4	4

	Credits 1st Sem.	2nd Sem.
Trigonometry, Mathematics 9 and	2	
Plane Surveying, Civil Engineering 1		2
or		
Principles of Cookery, Home Economics 3 and..	4	
Textiles and Sewing, Home Economics 11		3
Electives from the following subjects to make 19 hours:		
Carpentry & Wood Turning, Mechanical Engineering 1a & 1b	3	3
Forging, Mechanical Engineering 2	2	
Mechanical Drawing, Mech. Engineering 5	3	
Business Law, Commerce 9	3	
Economic Geography, Commerce 13		3
General Accounting, Commerce 11	2	
Business Principles, Commerce 12		2
Sophomore Year		
English Literature, English 11 & 12	3	3
Modern History, History 7 & 8	3	3
French 3 & 4, German 3 & 4, or Spanish 3 & 4	4	4
*Military Tactics	1	1
Two of the following sciences:		
General Botany, Botany 2 & 3	4	4
General Zoology, Zoology 3 & 4	4	4
Quantitative Chemistry, Chemistry 3		3
General Physics, Physics 3 & 4	5	5
Analytic Geometry, Mathematics 11	5	
Calculus, Mathematics 12		5
Organic Chemistry, Chemistry 11	4	
Volumetric Analysis, Pharmacy 9		4
Junior Year		
General Astronomy, Mathematics 15		3
American Government, History 13	3	
Psychology, Education 1	3	
Extempore Speaking, Public Speaking 3	2	
Political Parties, History 14		3
Elective from Group 1	3	3
Elective from Groups 1 & 2	7	10
Senior Year		
Economics, History 15	3	
Geology, Agronomy 10	5	
*Military Tactics	1	1
French 1 & 2, or German 1 & 2, or Spanish 1 & 2	4	4

*Instead of Military Tactics young ladies should take Art 14 and 15 in the Freshman Year, and electives in the Sophomore Year.

	Credits 1st Sem.	2nd Sem.
Sociology, History 16		3
Elective from Group 1	3	3
Electives from Groups 1 & 2	7	12
Group One		
General Botany, Botany 2 & 3	4	4
Economic Botany, Botany 12	3	
Plant Pathology, Botany 5	4	
Heredity, Botany 10		3
Classification, Botany 7	4	
Plant Histology, Botany 8 & 9	4	4
Quantitative Chemistry, Chemistry 3		3
Household Chemistry, Chemistry 8	4	
Agricultural and Sanitary Analysis, Chemistry 5	4	
Chemistry of Foods, Chemistry 4		4
Industrial Chemistry, Chemistry 7	3	
Agricultural Chemistry, Chemistry 6		3
Organic Chemistry, Chemistry 10 & 11	5	5
Volumetric Analysis and Drug Assaying, Pharmacy 9		4
General Physics, Physics 3 & 4	5	5
Advanced Physics, Physics 5 & 6	4	4
Heat, Physics 7	4	
Light, Physics 8		4
General Entomology, Entomology 3 & 4	2	3
Economic Entomology, Entomology 5 & 6	3	3
Systematic Entomology, Entomology 7 & 8	2	2
Household Pests, Entomology 9		3
Medical and Veterinary Entomology, Entom. 10	2	
Nature Study, Entomology 12	3	
Bird Study, Entomology 11		2
Animal Behavior, Entomology 13	2	
Beekeeping, Entomology 14	3	
General Zoology, Zoology 3 & 4	4	4
Histology, Zoology 7 & 8	4	4
Bacteriology, Zoology 10	4	
Embryology, Zoology 9	3	
Comparative Anatomy of Vertebrates, Zoology 12		3
Analytic Geometry, Mathematics 11	5	
Calculus, Mathematics 12		5
Calculus and Analytic Mechanics, Mathematics 13	5	
Analytic Mechanics, Mathematics 14		3

	Credits 1st Sem.	2nd Sem.
Plane and Spherical Trigonometry, Mathematic 9 & 10	2	2
Meteorology, Agronomy 11		3
Group Two		
French, French 5 & 6	3	3
German, German 5 & 6	3	3
English Literature, English 13 & 14	3	3
English Literature, English 15 & 16	3	3
The English Novel, English 19 & 20	3	3
Rural Sociology, History 17	2	
American History, History 9 & 10	3	3

ELECTIVES IN JUNIOR AND SENIOR YEARS IN GENERAL SCIENCE (Continued)

Rural Economics, History 18	2	
Theory of Design, Art 3		1
Applied Design, Art 4 & 5	2	2
Art History, Art 6 & 7	2	2
Theory & Interpretation of Musical Forms Music 6	2	
History of Music, Music 7	3	
Harmony	3	3
Business Law, Commerce 9	3	
Money & Banking, Commerce 10		3
Economic Geography, Commerce 13	3	3
General Accounting, Commerce 11	3	
Business Principles, Commerce 12		2
Literary Interpretation, Public Speaking 1 & 2	3	3
Extempore Speaking, Public Speaking 3 & 4 or 5 & 6	2	2
Argumentation and Debate, Public Speaking 7	3	
Public Address, Public Speaking 9 & 10	2	2
Elementary Public Speaking, Public Speaking 11 & 12	4	4
The Speech for Special Occasions, Public Speaking 8		3
Carpentry and Wood Turning, Mechanical Engineering 1a & 1b	3	3
Forging, Mechanical Engineering 2	2	
Mechanical Drawing, Mechanical Engineering 5	3	
Educational Psychology, Education 2		3
History of Education, Education 3	3	
School Administration, Education 5		3
Principles of Teaching, Education 4		3

	Credits 1st Sem.	2nd Sem.
Educational Measurements, Education 7	3	
Educational Sociology, Education 6		3
Supervision & Practice Teaching, Education 8	4	4
Psychology, Education 1	3	

TWO YEARS COURSE IN PHARMACY

First Year

Elementary Chemistry, Chemistry 1 & 2	4	4
General Botany, Botany 2 & 3	4	4
Anatomical Methods, Zoology 5 & 6	4	4
Pharmacy Latin, Pharmacy 1	3	
Military Tactics	1	1
Pharmacognosy, Botany 11		4
Pharmaceutical Problems, Pharmacy 6	2	

Second Year

Materia Medica, Pharmacy 2 & 3	5	5
Pharmacy 4 & 7	5	5
Pharmacy Laboratory, Pharmacy 5 & 8	3	4
Organic Chemistry, Chemistry 11	4	
Volumetric Analysis, Pharmacy 9		4
Military Tactics	1	1

NOTE—Students who have received the degree of Pharmacy Graduate may receive the degree of Bachelor of Science upon completing sufficient work in addition to the two-years course to make one hundred and forty-four hours of credit.

Of the additional work the following courses are required:

Rhetoric	6 hours
English Literature	6 hours
History	6 hours
Modern Language	16 hours

The remaining work to be elected in physics, chemistry, botany, bacteriology, zoology, or histology. Students electing physics should take trigonometry.

Department of Instruction

ANIMAL HUSBANDRY

Professor Wilson; Associate Professor Thompson; Mr. Cramer.

It is generally admitted that livestock farming is the basis for an intensive agriculture and that it, as well as good farming, must be practiced if the fertility of the soil is to be maintained.

Work in this department gives the student a practical and scientific knowledge of animal husbandry as applied to South Dakota conditions. The College herds and flocks include representatives of eighteen of the leading breeds of domestic animals. These are all used for class and demonstration purposes. Men having completed this course are well equipped to manage livestock farms and to judge stock shows and to teach.

The following subjects are offered by this department:

1. **Stock Judging.**—Three credits; first semester. Study and practice in judging of horses, cattle, sheep and swine. Special attention is given to the use of score cards both for market and breeding animals.

2. **Breeds of Live Stock.**—Three credits; second semester. A study of the various breeds, their origin, development, characteristics and adaptability as to use and locality; work accomplished by the noted breeders of the past and present day review.

Text: Plumb's Types and Breeds of Farm Animals.

3. **Advanced Stock Judging.**—Two credits; first semester; prerequisite, Animal Husbandry 1 and 2.

Particular attention is given to the placing of animals and the giving of reasons why they are so placed. This course includes the judging of market, breeding and show animals.

4. **Principles of Animal Breeding.**—Three credits; second semester; prerequisite, Animal Husbandry 2. This course deals with the laws that govern reproduction and the development of animals, and the different systems employed in producing both market and breeding animals; study of blood lines and pedigrees.

Text: Davenport's Principles of Breeding.

5. **Animal Nutrition.**—Three credits; first semester; prereq-

uisite, Animal Husbandry 1 and 2, and Chemistry 2. This subject deals with the physical and chemical characteristics of the various feeding stuffs and their relation to practical feeding operations.

6. **Stock Feeding.**—Three credits; second semester; prerequisite, Animal Husbandry 5. A study of the feeding of the various classes of live stock, compounding of balanced rations, results of experimental and practical feeding investigations.

Text: Henry's Feeds and Feeding.

7. **Live Stock Production and Management.**—Four credits; second semester; prerequisites, Animal Husbandry, 1, 2, and 6. This course will consist of lectures pertaining to the proper locations for live stock farms, the kind and arrangement of buildings, founding and management of herds and flocks, capital required, methods of selling, etc.

8. **Poultry Culture.**—Two credits; first semester. A general course dealing with housing, yarding, marketing and the care of breeding and growing poultry.

9. **Poultry Feeding.**—One credit; first semester. This course should be preceded or accompanied by Poultry Culture. A course dealing with the feeding of breeding flocks; laying flocks; fattening for market and home use, and a general discussion of feeds as adapted to poultry.

10. **Poultry Breeding.**—Two credits; second semester. This course should be preceded or accompanied by Poultry Culture. A study of the mating systems used in producing show and utility birds; the mechanism, operation and management of incubators and brooders.

VETERINARY MEDICINE

Dr. Lipp

The prevention of animal disease by the adoption of better animal hygiene, sanitation, and care is receiving more attention today than ever before. The reason for this is due to a fuller knowledge of the best methods of applying these measures to the prevention of disease, and to the rapidly increasing desire on the part of stock raisers and others for preventive measures. Even with the most modern methods of treatment, it is truer today than ever before, that preventing animal disease is more desirable and less expensive than treating it. The rapidly increasing value of live stock together with the danger of introducing and spreading disease by the

more complex systems of live stock raising and transportation, have increased the rapidity with which diseases spread over wide areas. Thru the necessity for protecting his own interests, the farmer of today is paying more attention to these matters. Indeed the agricultural college that does not give courses that enable its students to act intelligently and in co-operation with the local and state authorities for the prevention and control of animal diseases, fails to fulfill its duty to the state and nation.

All the courses offered by the Veterinary Department have been planned to give students the training that will assist them in the prevention of diseases common in this state. No attempt is made to teach students to diagnose or treat any of the more serious diseases, but rather to recognize their seriousness early and secure the services of trained veterinarians. Treatment, however, is only for those diseases that yield to the action of simple remedies. Every effort is made to have students realize the value of competent veterinary service. They are urged to secure it early and thereby increase the chances for early and complete recovery.

1. **Veterinary Anatomy.**—Two credits; second semester. This course gives students a knowledge of the structure of the front limb of the horse, and the care needed to maintain it in a healthy condition, and fit for the highest service. The lectures consist of a brief study of the anatomy of the front limb, and a more detailed study of the structure of the horse's foot. Especial emphasis is placed on the prevention of diseases of the foot.

2. **Veterinary Hygiene and Sanitation.**—Two credits; first semester. This course includes a study of the animals' needs of ventilation, and the best systems of ventilation. Stable lighting, the barn yard, feed lot, and in fact all parts of the barn and its surroundings are considered in their relation to animal health and the prevention of disease.

3. **Veterinary Medicine.**—Three credits; second semester. This course deals with the cause, spread, and control of the common infectious and contagious diseases of farm animals. No attempt is made to develop proficiency in diagnosis, but rather to understand the methods by which these diseases spread, and to teach the student to co-operate intelligently with local and state authorities for their control and eradication.

4. **Common Diseases.**—Two credits; first semester. This course includes a study of many of the commoner diseases, their causes and

prevention. Simple treatment and methods of handling are studied in connection with those diseases that can be easily diagnosed, and that yield readily to proper care.

5. Veterinary Physiology.—Three credits; second semester. This course includes a study of the processes of digestion and assimilation in horses and cattle. Food is traced from the mouth thru the various digestive processes to the tissues of the body. The use of food within the tissues and the production of waste are then studied, and finally the excretions and their composition.

DAIRY HUSBANDRY

Professor Larsen; Assistant Professor Jones; Mr. Hungerford; Mr. Eldridge; Mr. Lynch

This department offers two separate courses: (1) The four-years agriculture course, the last one and one half years of which are devoted chiefly to special dairy studies. (2) The three-months dairy course.

The first course has been outlined with a special view of fitting young men to become teachers and investigators of dairying in public schools, agricultural colleges and experiment stations, inspectors of creameries and dairy products in municipal, state and government service and superintendents of large creameries and dairy farms.

The second course is given with a view of training men to become successful operators of creameries, cheese factories, central plants and dairy farms.

The demand for good men properly trained along dairy lines is great. Compensation for dairy and creamery work is good. Worthy students can depend upon the co-operation of this department in securing suitable work.

The Dairy Husbandry Department operates on a commercial basis a well equipped creamery in which butter, cheese and ice cream are manufactured throughout the year. The department occupies a two-story brick building. On the first floor are the engine room, creamery rooms with full equipment for butter, cheese and ice cream making, refrigerating rooms, locker and reading room, and a large laboratory used for instructional purposes. On the second floor are located class rooms, offices, dairy bacteriology laboratory, and chemistry research laboratory.

The dairy herd, which consists of representatives of the principal dairy breeds, affords an excellent opportunity to become acquainted with dairy types. The dairy barn is large and well equipped. Milking machines are in daily use, thus affording students opportunity to acquire practical knowledge regarding machine milking.

Experiments relating to feeding, breeding and care of dairy stock and the manufacture of dairy products are in progress at all times. Students may have the advantage of keeping in touch with these experiments, note manner of outlining and executing investigational work, and profit from results. Advanced worthy students may arrange to assist in some of this work.

The following work is offered.

1. **Farm Dairying.**—Three credits; second semester. A study of the economic production, relation of form of dairy cow to production, secretion and composition of milk; of the comparative economy in disposing of and utlizing milk for various purposes on the farm, of testing milk and its products for fat, acid and common adulterations; of the effects of germs and degree of purity of dairy products; of the separating and handling of milk and cream and the manufacture of butter and cheese on the farm.

2. **Inspection and Testing of Dairy Products.**—Four credits; first semester.

Those taking this course should have at least one term's work in chemistry. It embodies a thorough study of the Babcock test for fat, of the lactometer and its application, of the tests for determining the acidity of dairy products, of the various tests for moisture in butter, of the influence and detection of different preservatives and adulterations, and a study of the various pure dairy food standards.

3. **Dairy Bacteriology.**—Four credits; second semester.

In this course are taught bacteriological principles as related to dairying, contamination of milk, fermentations of milk and their control, relation of disease bacteria to milk, preservation of milk for commercial purposes, bacteria as related to the manufacture of butter, cheese, and ice cream. General bacteriology is a prerequisite study.

4. **Factory Operation (Creamery.)**—Four credits; first semester; prerequisite, Dairy 2.

A thorough study is made in receiving, sampling and separation of milk and cream, the preparation and use of starters, pasteurization and ripening of cream, principles of churning, washing, salting, working, packing and marketing butter. Attention will also be given

to the organization, location, construction, drainage, cooling and ventilation of factories and creameries, the economic disposal of factory by-products and various methods of factory refrigeration.

5. **Factory Operation (Cheese.)**—Four credits; second semester. This course comprises a study of milk as applied to cheese-making, the manufacture of hard and soft cheeses, including the principles involved in the setting, cutting, cooking, dipping, milling, salting, pressing, curing and marketing of cheese.

6. **Dairy Management.**—Three credits; first semester. The various methods of improving and upbuilding a dairy herd, and the advanced judging of dairy stock will be emphasized, methods of weighing, testing and recording feed consumed and milk produced by each cow will be outlined. The history and adaptibility of various dairy breeds to different conditions and relation of dairy types to milk producing capacity will be studied. This course will also embody a study of the extent to which dairy farming is practiced and under what conditions it is best applicable, of dairy farming as an adjunct to general farming and the arrangement and construction of dairy farm buildings, stalls, yards, etc.

7. **Dairy Technology.**—Four credits; second semester; prerequisite, Chemistry 2 and Dairy 3.

This course treats of the ways in which milk and its products are utilized outside of the scope ordinarily embraced under dairying. It comprises such subjects as value of milk as a food, the preparation of certified, modified, standardized, fermented and condensed milk, the manufacture of casein, milk ivory, milk sugar, renovated butter and oleomargarine.

8. **Dairy Research.**—Second semester. A study of various views held by different authorities on certain important dairy subjects, a digest of recent dairy work of the experiment stations, and of comparative dairying as practiced in leading countries. A reading knowledge of German is recommended.

9. **Dairy Practice.**—The college has a commercial creamery and cheese factory in operation every day during the year except Sunday. Students who specialize in dairying and need practical experience should make it a point to take this course. Arrangements can be made to do this practical work at almost any time during the year. Vacation time is recommended.

10. **Domestic Dairying.**—Two credits; elective. This course includes lectures and laboratory work on such phases of dairying as will be of greatest interest and value to ladies and home life, such as properties of milk, the various uses of milk, and each of its component parts for the home as well as for commercial purposes, and the relation of germs to quality of dairy products and to consumers of dairy products. The detection of adulteration of milk and dairy products, modification of milk, the use of the Babcock

test for fat, effects of different ferments on milk and dairy products, and the making and judging of cheese and butter will be demonstrated in the college creamery laboratory.

11. **Advanced Inspection of Dairy Products.**—Four credits; first semester; prerequisite, Dairy 2, Chemistry 3.

This course takes up a study of the properties of the component parts of milk and its products including abnormal milk, condensed and powdered milks, butter from neutralized cream, oleomargarine and leading types of cheese.

12. **Advanced Dairy Bacteriology.**—Four credits; first semester; prerequisite, General Bacteriology and Dairy 3; elective. This course is a continuation of Dairy Bacteriology (Course 3.) It includes a study of isolation of the bacteria of special importance in the dairy industry, such as: thorough acquaintance of characteristics of the bacteria that produce undesirable fermentations, bitter milk, slimy milk, gargety milk, gassy cheese and condensed milk, rancid butter, etc.—and pathogenic organisms especially important in connection with market milk supply. It also includes the study of the desirable bacteria, such as: lactic acid producing organisms, those that produce desirable flavors in dairy products and the pure cultures widely used in connection with fermented milk drinks.

13. **Dairy Extension.**—Four credits; first semester, prerequisite, Dairy 1, 2, and 6; elective. This study emphasizes chiefly the subjects applied in different methods employed in the co-operative improvement of dairy cattle, co-operative building of silos, formation of cow testing associations and methods of keeping the various records, the making of official records with cows belonging to the various breeds, and the formation of co-operative creameries and co-operative marketing of dairy cattle and dairy products.

AGRONOMY

Professor Hume; Associate Professor Hutton; Assistant Professor Champlin; Mr. Loomis; Mr. Fowlds; Mr. Rilling.

The Agronomy Department is the department of soils and crops. To help students apply the principles of science to crop production on the farms of South Dakota is the essential purpose of the courses offered.

What is soil in South Dakota, or on some farm within the state? The student may learn to outline soil areas, to analyze soils, to observe field experiments, and answer the question for himself.

What crops will grow on South Dakota soil areas, and how may the growing of them be made most profitable to the man

who does the work? A study of the results of experiments will answer the questions for the student. It is attempted to give the student in agronomy that accurate knowledge of conditions which is necessary to success in farming.

The courses offered are fundamental, practical, scientific. They are designed for South Dakota farmers. They may be pursued with profit by prospective teachers of agriculture, or experiment station workers.

1. **Grain and Root Crops.**—Four credits; first semester. Production and marketing of the common field crops including barley, corn, flax, oats, potatoes, rye, and wheat etc. Classification, judging, and grading of seed. Open to all college students. Required of all agronomy students.

2. **Crop Breeding.**—Three credits; second semester. A discussion of the principles of cropping with emphasis laid upon improvement by selection, and breeding. Dealing chiefly with principal field crops of South Dakota,—corn, wheat, oats, barley, potatoes, alfalfa. In addition to text book references, current articles will be reviewed from such magazines as The Journal of American Society of Agronomy, Science, The Journal of Heredity. Students of this course may be requested to subscribe for at least one such magazine. Required of all agronomy students.

3. **Field Management.**—Two credits; second semester, prerequisite, Agronomy 1. Arrangement and management of crop rotations with special reference to cost and profit under South Dakota conditions. Required of all agronomy students.

4. **Forage Crops.**—Four credits; second semester. Production and marketing of field crops including meadow and pasture grasses, millets, prosos, sorghums, hemp, clovers, field peas, field beans, soy beans, etc. Open to all college students.

5. **Seed Inspection.**—Two credits; second semester. Seed testing, seed inpurities and method of eradication of weeds from farm crops and seeds, studies of the characteristics of crop impurities from the standpoint of eradication, such as quack grass, Canadian thistle and wild oats.

6. **Field Crops.**—Elective. Four to eight credits; prerequisite, Agronomy 2. Special problems for advanced students. The advanced student may become interested in some particular line of investigation, as crops for forage, a problem in corn breeding, the effect of storing of seed of corn or other crops upon germination and growth, the effect of various methods of cultivation, and problems of crop improvement. Such work may imply a study of previous experiments, cropping experiments in green house or on the field. The student may be required to submit a final report or

thesis. Time and number of hours to be arranged with instructor in charge.

7. **Crop Inspection.**—Two credits; second semester. Advanced grain judging, examination of the several varieties of cereals, root and forage crops, with especial reference to resistance to adverse weather conditions and diseases, examination of crops in the field, experiment plots and prepared specimens.

8. **Soil Physics and Management.**—Four credits; first semester; prerequisites, Physics 1 and 2, Chemistry 1, 2, and 3. This course deals with the origin and development of the soil under different climatic conditions; classification of soils upon several bases; texture, porosity, specific gravity, plasticity, capillarity, granulation of soils; the soil as a reservoir for water; the movement and control of soil water; irrigation and drainage; the alkali problem; aeration of the soil, its relation to soil texture and plant growth; soil temperature; the physical effect of manures upon the soil; soil erosion by wind and running water—blowing and washing—and their control; the practical application of the foregoing to methods of tillage; crop rotations and the application of green and farm manures in the management of different types of soil. The laboratory work includes a careful study of the physical properties of the soil through observation and practice; soils are also studied under field and green house conditions.

9. **Soil Fertility.**—Four credits; second semester; prerequisite, Agronomy 1 and 8, and Chemistry 11. The relation of the fertility content of the soil to crop yields; effect of supplying various elements of fertility; effects of different rotations and system of farming in relation to permanent agriculture; a study of a system of agriculture in relation to permanent agriculture; a study of a system of agriculture adapted to South Dakota conditions. The laboratory work includes the analysis of manures and fertilizers and the determination of their agricultural and commercial values; the analysis of various farm products; the analysis of a soil, preferably from the student's home farm, to determine the fertility content. These analyses serve as the basis for devising a system of permanent agriculture for the student's home farm.

10. **Advanced Soil Physics.**—Four credits; first semester; prerequisite, Agronomy 9. This course is designed for those students who wish to continue the work in Soil Physics begun in Agronomy 8. A study in the field of the effects of discing, harrowing, rolling, sub-soiling, frequency and depth of cultivation with reference to conservation of soil moisture. The student may select a soil in which he is interested and make a complete physical analysis thereof; he may make a careful study of the movement of the water therein and its effect upon the growth of plants; he may choose a special irrigation or drainage problem in which he is interested; the results of the work are summarized in a final report or thesis. Stu-

dents who elect this course are advised to signify their intention of so doing at the end of the college year, so that materials may be collected during the summer, and observations reported.

11. **Advanced Soil Fertility.**—Four credits; second semester; prerequisite, Agronomy 9. This course is a continuation of Agronomy 9 and permits the student to study in detail a special soil in which he may be interested or to pursue a special problem. The work may include pot culture work in the green house; analysis of the soil used in the pots; application of various fertility elements and their relation to the management of the soil; the study of the micro-organisms of the soil in relation to the preparation and availability of plant food, preparation of culture media, cultures from soil suspensions, preparation and study of a few pure cultures, ammonification, nitrification, nitrogen fixation, legume bacteria and conditions favorable to their growth, inoculation; results of bacterial action determined by quantitative analysis; reading of bulletins, books, etc., and the preparation of a bibliography. The results of the study will be submitted in a final report or thesis.

12. **Irrigation and Drainage.**—Two credits; second semester. A consideration of the effects of the change in water contents of soils through irrigation and drainage; the effect upon the physical condition of the soil and upon its productivity, special attention given to the problems of irrigation and drainage of unreclaimed lands in South Dakota. Lectures, reading, field observations.

13. **Earth Science; Geology.**—Five credits; first semester. A course in general geology with the greater emphasis placed upon the physical division of the subject. The geology of South Dakota in relation to soils, water supplies and mineral wealth is given special attention. Collections of rocks, minerals, typical fossils, physiographic and geologic models, lantern slides, charts and maps are available for laboratory work and reference.

14. **Earth Science; Meteorology.**—Three to five credits; second semester. A practical course dealing with the laws controlling the movements of the atmosphere, the study of climatological and weather factors, with special attention to conditions in the United States, the climate and weather of South Dakota in relation to her various economic interests, weather maps and forecasts.

15. **Feed Crops**—A course of lectures on crop production from the standpoint of feeding, offered to the short course students in dairying at the request of the Dairy Husbandry Department.

Graduate Courses.—A limited number of courses of study may be arranged for students who have already received the Bachelor's Degree and who desire to pursue some line of investigational work. Such students should consult with the professor in charge. Problems relating to systems of farming and soil fertility, mechanical composition of soils, drainage water, variation in type as related to crop

yields, influence of selection and breeding upon yield of special crops may be included in a list of possible studies for graduates.

HORTICULTURE AND FORESTRY

Professor Hansen; Mr. Stoltenberg.

In this department the work is given from two standpoints. In one, especially in the study of genetics, emphasis is placed upon the general philosophy of the subject as being essential to a general education. The claim is made that some of the priciples of horticulture and forestry are essential to any well rounded education and to the best preparation for citizenship. The second standpoint is that of students intending to make a life work of horticulture or forestry, either as a business or a profession. Throughout the course full use is made of the student's attainments in the various sciences underlying these subjects. The variation of plants and the principles and methods of their development under the hand of man are considered, as well as their propagation and cultivation.

Field and laboratory exercises emphasize the lectures and recitations of the class room. The habit of independent investigation and close observation is encouraged by requiring written reports of outdoor excursions or demonstrations. Excellent facilities for practical illustration are offered by the ninety acres of experiment station horticulture grounds and college campus. In this domain are included orchards, forestry plantations, nurseries, vegetable gardens, small fruit, plantations, flower borders and a collection of ornamental plants. Special attention is paid to the breeding of hardy fruits adapted to prairie conditions and the work in this line is now second to none in extent. The department greenhouses consist of two sections, one for the general floriculture work and the other for fruit-breeding experiments. In addition, the horticultural buildings contain class rooms, laboratory, grafting and potting rooms and storage cellars.

Special stress is placed upon practical work in the grafting room.

The following work is offered:

1, 2. **General Horticulture.**—One credit each semester. An

introduction to the various divisions of horticultural work, especially the propagation of plants and the best western nursery methods of planting, pruning and cultivation. Special attention is given to the grafting and budding of fruit trees. Elementary exercises in the identification and description of fruits and the origination of new varieties. Students are required in their laboratory notes to give the reasons why as well as the methods.

3. **Floriculture and Market Gardening.**—Two credits; second semester.

The commercial and amateur cultivation of flowers and vegetables under glass and in open air; lectures, demonstrations, and text book work.

4. **Forestry.**—Two credits; first semester. Principles of forestry; the influence of forests on climate; timber planting on the prairies; European forestry methods as modified by prairie conditions; shelter belts; the propagation, cultivation, characteristics and use of forest trees. Lectures and demonstrations.

Texts: Pinchot's Primer of Forestry; Cheyney's The Farm Woodlot; Green's Forestry in Minnesota; Proceedings of the American Forestry Congress.

5. **Systematic Pomology.**—Two credits; first semester. Principles of fruit culture with special reference to prairie conditions; exercises in the identification and description of fruits.

Texts: American Horticultural Manual, Bailey's Principles of Fruit Culture, many bulletins and reports.

6. **Landscape Gardening.**—Four credits; second semester. The philosophy of the beautiful in its various modes of expression; gardening as one of the fine arts; historic developments of the ancient or geometric and the modern or natural styles; the best ornamental trees, shrubs, plants and hedges. Special attention is paid to the development of originality in the planning and laying out of country and city home grounds, parks and school grounds. Lectures; many text books and references.

7. **Heredity.**—Three credits; second semester. This subject is especially recommended to students of the sciences relating to plants and animals, and also to students of general history and sociology. The evolution of plants and animals under the hand of man and in the state of nature; the philosophy of artificial evolution or the modification and amelioration of plants and animals by environment, selection and hybridization; the relation of genetics to society; recent theories and work in plant-breeding.

Texts: Darwin's Animals and Plants under Domestication; De Vries' Species and Varieties, their Origin by Mutation; Bailey's Plant-Breeding and Survival of the Unlike; Reports of International Conferences on Genetics; Reports of the U. S. Department of Agriculture.

8. **Plant Materials.**—One credit; second semester. A field and laboratory study of the trees, plants, shrubs and flowers used in Landscape Gardening.

9-10. **Nursery and Greenhouse Management.**—Four credits each semester. A field and laboratory study of nursery and greenhouse operations throughout the school year. Carefully written reports are prepared. This is supplemented by the required practical work outside of the school year.

11. **Experimental Horticulture.**—Two credits; second semester; prerequisite, courses 1-8. A survey of some of the chief problems. An effort is made to develop the spirit of initiative and originality in research work.

HOME ECONOMICS

Professor Ward; Miss Leaton; Miss Swift; Miss Erwin; Miss Siglinger.

The purpose of this department is to provide training along the lines of intelligent house-keeping, and home-making. The location of the work is the entire third floor of the North Building. The rooms consist of a large cooking laboratory, a dining room, a sewing room, and a recitation room provided with the equipment necessary for carrying on the work. Through the general library, opportunity is given for the use of the newest and best literature relating to the subject.

The work offered is intended to impart knowledge, develop skill in execution, stimulate self-direction and broaden and strengthen the individual. A good foundation of pure science is laid for all applied science in the cooking and sanitation courses while the household arts give opportunity for artistic expression, the principles of which are gained through the regular art training.

For those who wish to teach Home Economics training is also given through carefully supervised practice teaching and the special methods course in addition to required work in the department of education.

The general subjects of the department are as follows:

For Home Economics 1 and 2, see the preparatory department.

3. **Hygiene.**—One credit; first semester. This course includes a general study of hygiene of the person, clothing and surroundings with consideration of social and ethical questions.

4. **Food Preparation.**—Three credits; second semester. The text book work covers the study of food source and manufacture.

In laboratory work special emphasis is placed upon the principles and technique of cooking. The aim of the course is to develop skill in cooking, and an independence of recipes through an understanding of basic principles.

Text and reference work required.

5. **Food Preparation.**—Four credits; first semester. Prerequisite, Home Economics, 4. The work covers a study of food composition and value. In laboratory work special emphasis is placed upon the cost and serving of food. Practice is given in serving meals, buffet and cafeteria luncheons.

Text and reference work required.

6. **Serving and Dietetics.**—Four credits; second semester; prerequisites, Home Economics 4 and 5, Organic Chemistry and Physiology. The course consists of a study of the fundamental principles of human nutrition, and the application of these principles under varying conditions and laboratory work in the planning, preparation and serving of dietaries for normal individuals of various ages, and under varying economic and social conditions.

7. **Special Problems in Cookery.**—Three credits; first semester; prerequisites, the first three years of the Home Economics course or equivalent. This course is planned to offer opportunity for advanced and original work in cooking, and the study of foods. Special problems are studied by individuals or in group, and results reported.

Reference work required.

8. **Home Nursing and Sanitation.**—Three credits; second semester; prerequisites, Home Economics 3, 4 and 5. The work includes a study of the general care of the sick; directions for emergencies, consideration of home, and community problems in sanitation.

Text and reference work required.

9. **Household Management.**—Three credits; first semester; prerequisites, Physics 9, Home Economics 4 and 5. The work includes a study of the planning and general care of the house and furnishings; cost, and use of labor saving devices; purchase, and care of food; marketing conditions; pure food laws; budgets and household accounts.

Reference and laboratory work required.

10. **Plain Sewing.**—Five credits; first semester. The work consists of a study of the stitches and their application on small articles; the use of commercial patterns; the use and application of the sewing machine in the making of plain undergarments, and a simple waist.

11. **Textiles.**—Three credits; second semester. The work includes a study of the principal textile fibres; the selection of clothing and the making of clothing budgets.

Text and reference work required.

12. **Dressmaking.**—Three credits; second semester; prerequisites, Home Economics 11 and 12. The work includes the cutting and fitting of a light weight woolen dress; remodeling of a dress and making a fancy waist or a substitute.

13. **Advanced Dressmaking.**—Three credits; first semester; prerequisites, Home Economics 11, 12, 13. The course consists of practice in designing costumes; the use of the dress form, and construction of an evening gown. Supplementary work to be added.

14. **Theory of Teaching Home Economics.**—Three credits; second semester; prerequisites, three years work in the Home Economics course. The course is planned to study the educational background and to give a summary and review of the entire field of Home Economics. This is done by planning the content of courses, reviewing text books, writing lesson plans, and discussing methods of teaching.

15. **Millinery.**—Two credits; second semester. Elective, open only to seniors.

MECHANICAL ENGINEERING

Professor Solberg; Professor Cook; Assistant Professor Bonell; Mr. Welch.

The object of the work offered is to give the students a thorough training in the theoretical principles underlying the science of mechanics and machines and at the same time to enable them to become particularly familiar with some of the numerous applications of these priciples.

The instruction is both theoretical and practical. The usual methods of text-book study and lectures are employed, but the student is required to put into practice, as far as possible, the instruction he receives. Hence the work of the classroom is supplemented and practically exemplified by practice in shops. The student not only studies the theories of constructing and operating machinery, but in the drawing room he designs, and in the shop he constructs and operates such machines. It is believed that those who complete this course will be able to fill responsible positions in manufacturing establishments.

The department is located in the Engineering Building.

The workshops are supplied with a large variety and quantity of tools. They are furnished with twenty-five sets of carpenter tools and eight wood turning and one pattern maker's lathe, a scroll saw, a combination circular saw and a twenty-inch planer. There is also a variety of special tools for wood working.

The machine shop is furnished with a large number of engine lathes of different sizes, universal milling machine, shaper, planer, tool grinder, drill press, emery wheels and a great variety of hand tools. The machinery is driven by a 50-horse power steam engine.

The Experimental Engineering Laboratory is equipped with a 100,000 pound vertical screw testing machine, for making tensile and compressive tests of the various materials of construction; an automatic shot cement briquette-testing machine; a gas engine; a 10 by 10 steam engine; an 8 by 10 steam engine; a 5 by 7 steam engine; and there are also available for this work a 12 by 14 steam engine and two 48 by 16 horizontal tubular boilers. A calorimeter for determining the heat values of gases; a calorimeter for making British thermal unit tests of coal, and an apparatus for flue gas analysis are also used in this work.

The laboratory also possesses a large amount of small apparatus such as indicators, planimeters, steam gauges, thermometers, etc., and a complete outfit for making tests of sand, cement and concrete.

Work in architectural drawing and designing is offered. Additional work along this line will be given to students who desire it.

A number of pictures, drawings, and illustrative material has been recently added to the equipment through the liberality of manufacturers and friends of the College.

The following work is offered.

1a. Carpentry and Wood Turning.—Three credits; first semester. Demonstration and work in the care and use of wood working tools. Talks on design of furniture, cabinets and frames. Practice at the bench in the working of a variety of woods and finishes. Work in framing or building construction. The study of manual training outlines.

1b. Carpentry and Wood Turning.—Three credits; second semester; continuation of Course 1a.

2. **Forging.**—Two credits; first semester. Demonstration and work in the care and use of the fire and forging tools together with the work in iron, mild steel and tool steel. The class work will include work in bending, drawing out, upsetting, shaping and tempering of tools, and art smithing. The course will offer a good outline in metal work for manual training.

3. **Machine Shop.**—Two credits; second semester. Includes a study of the materials used in machine work; shop sketching; methods of laying out work; exercises in pipe fitting, chipping; filing, scraping, belt lacing, shaft aligning, babbiting, riveting, soldering, hand and ratchet drilling; and the elementary principles of machine work.

4. **Machine Shop.**—Three credits; first semester. A study of the principles and methods of machine work; problems involving the use of the various machine tools, as the lathe, planer, shaper, milling machine, drill grinder, drill press, etc. Regular text book and class work supplements the actual work in the shop during both semesters of machine shop. Prerequisite, Machine Shop 3.

5. **Mechanical Drawing.**—Three credits; first semester. Instrumental, geometrical problems and parts of machines. This work is offered during the entire year, and at hours convenient to teachers and students.

6. **Architectural Drawing.**—Two credits; first or second semester. Rendered drawings of simple buildings, examples of various orders, giving facility in draughtmanship, familiarizing students with principles.

6a. **Architectural Design.**—Two credits; first semester. Principles of planning introduced in practical problems, exercises in composition and details.

6b. **Perspective.**—Three credits; first or second semester.

7. **Descriptive Geometry.**—Two credits; first semester; prerequisite, plane geometry. Instruction in methods of representing by drawing all geometrical magnitudes and solution of problems relating to these magnitudes in space.

8. **Machine Design.**—Three credits; second semester. Solution of various problems involving the design of simple parts of the machine.

9. **Machine Design.**—Two credits; first semester. Continuation of Mechanical Engineering 8.

10. **Elements of Mechanism.**—Three credits; first semester. Elements of machinery, velocity ratios, graphic representation of speed and acceleration; motion transmitting parts, such as gears, belts, cams, screws, link work; automatic feeds, parallel and quick return motions; designing. Text: Wood and Stahl.

11. **Gas Engines and Gas Producers.**—Two credits; second semester; prerequisite, Thermodynamics. Study of the theory, design

and operation of gas, gasoline and oil engines and of the various types of gas producers.

12. **Steam Engines and Thermodynamics.**—Five credits; second semester; prerequisite, Calculus. Study of the modern steam engine, slide valve, and when in combination with independent cut-off valves, link motion and Zeuner diagrams, reciprocating parts and indicator practice; the principles of the theory of heat which are necessary to a study of the various kinds of heat engines; the application of laws of thermodynamics to the steam engine and a study of steam engine economy by entropy temperature analysis and by other graphical methods. Text: Ripper's Steam Engine.

13. **Steam Boilers.**—Two credits; first semester; prerequisite, Mechanical Engineering 16. Advantages and disadvantages of using the various forms of boilers, methods of construction, tubes, plates, riveting, bracing, grate and heating surface, gauges and feed appliances, setting, care and operation. Text: Peabody's Steam Boilers.

14. **Kinematics.**—Two credits; second semester. Geometry of machinery, problems in the design of motion transmitting appliances.

15. **Mechanics of Materials.**—Four credits; second semester; prerequisite, Analytic Mechanics. Study of the strength and elastic properties of the materials of construction and the behavior of and characteristics displayed by these materials when put under stress. Text: Merriam's Mechanics of Materials.

16. **Experimental Engineering.**—Three credits; first semester; prerequisite, Mechanics of Materials. Testing of materials of construction including investigation of problems in connection with use of concrete.

17. **Experimental Engineering.**—Four credits; second semester. Includes testing of gauges, thermometers, planimeters; determination of heat value of coal; use of steam and gas engine indicators, throttling and separating calorimeters, dynamometers and Prony brakes; and complete efficiency tests of engines and boilers under actual running conditions. It is the endeavor in this work to make the student familiar with the construction and operation of steam engines, steam boilers, gas engines and the many attachments and auxiliaries necessary for their efficient operation.

18. **Experimental Engineering.**—Three credits; second semester. Includes the problems and investigations embraced in Experimental Engineering 18 which are of particular importance to the Civil Engineer.

19. **Engineering Design.**—Four credits; first semester. Solution in the drawing room of some practical problems in design and making working drawings of same.

20. **Engineering Design.**—Four credits; second semester. Continuation of Mechanical Engineering 21.

21. **Structural Design.**—Two credits; first semester. Design of roofs and buildings for power stations. For students in mechanical and electrical engineering.

22. **Structural Engineering.**—Two credits; second semester. Continuation of Mechanical Engineering 23, with special reference to results obtained from Mechanical Engineering 19.

23. **Statics.**—Two credits; first semester. Treated with special reference to the requirements of engineers. Resolution and composition of forces; center of gravity; principles of equilibrium with numerous applications. Graphic as well as algebraic methods are used. The various hurtful resistances to friction are considered, and numerous problems worked out in the drawing room.

24. **Heating and Ventilation.**—Two credits; second semester. A study of the principles underlying the design of the various systems of heating and ventilation in common use, including such details as loss of heat from buildings, problems in proportioning ventilating ducts; and the arrangement of systems of piping for steam and hot water. A study is also made of the various mechanical details entering into the installation of private plants and also plants operated from central stations.

25. **Masonry and Foundations.**—Two credits; first semester. A study of cement, concrete and building stone with special reference to their use in walls and foundations; bearing power of soils; design and construction of foundations of various kinds.

26. **Special Problems in Experimental Engineering.**—Two credits; second semester; open to senior engineering students upon approval of head of their department.

27. **Concrete Construction.**—Two credits; first and second semesters; elective; open to junior or senior students in general science and agricultural courses. Will include practical problems in the use of concrete and the testing of concrete materials.

28-29. **Thesis Work.**—Two or three credits each semester. At the beginning of the fifth year's work a subject is assigned to each student, which he is to investigate, and on which he is required to prepare a thesis. This work may involve original design, or it may involve an experimental investigation of the action of certain machines or appliances or of the phenomena developed by the action of certain mechanical forces. In the pursuit of this work the student is thrown largely on his own responsibility. He is expected to familiarize himself with the literature on the subject and to study thoroughly the methods involved in the subject selected. The subject chosen should be submitted to the professor in charge not later than November first of the current year.

ELECTRICAL ENGINEERING

Professor Brackett

The purpose of the work offered in Electrical Engineering is to impart to the student a practical knowledge of the principles of applied electricity. A well equipped laboratory is provided for the use of the student to supplement the lecture and recitation work of the class room. The laboratory equipment consists of generators and motors of both direct and alternating current types, transformers and measuring instruments of different types and classes for recording and measuring currents, pressures and speeds. A sixty-cell storage battery is used in connection with the work in photometry. Various types of lamps, arc and incandescent, lamp banks, rheostats, and other apparatus are also available.

The student will be taught how to set up and adjust for the best conditions of operation all the usual types of dynamos, motors, transformers and standard auxiliary apparatus. Much additional laboratory work will be given to develop a clear understanding of the fundamental principles involved in the design of modern electrical machinery and in the most advanced engineering practice. The knowledge to be derived from this work is very important in the practical operation of electrical machinery and systems, but it cannot be obtained directly under the conditions of commercial service, where most of the apparatus must be used in one way only at all times.

The following courses are offered.

1. **Electricity and Magnetism.**—Four credits; first semester; prerequisite, Mathematics 7, 8 and 9, Physics 4. This subject embraces a study of the principles of the electric and magnetic circuits, electro-magnetic induction, self-induction and capacity, also direct current dynamos and motors and their uses under ordinary service conditions.

2. **Electrical Measurements.**—One credit; second semester; prerequisite, Electrical Engineering 1. Instruction and practice in the use, care and standardization of ammeters, voltmeters, wattmeters, resistance standards, Wheatstone bridges, potentiometers, sensitive

galvanometers and standard cells. Estimation of the accuracy and reliability of different methods of testing, the correction and elimination of errors.

3. **Alternating Currents.**—Five credits; second semester; prerequisite, Mathematics 11, Physics 4, and Electrical Engineering 1. Study of the flow of alternating currents, inductance, capacity, principles of construction of alternating current generators and motors, transformers; measurements of inductance and capacity, wave form of pressure and current, tests of machines and transformers.

4. **Dynamo Electric Machinery.**—Five credits; second semester; prerequisite, Mathematics 11, Physics 4, and Electrical Engineering 1. Principles underlying the design, construction and operation of direct current generators and motors. Experimental study of the behavior of different types of motors and generators, efficiency tests and adjustments of machines for different conditions of service.

5. **Alternating Currents and Alternating Current Machines.**—Five credits; first semester; prerequisites, Mathematics 11, Physics 4, and Electrical Engineering 1, 2 and 4. A course similar to Electrical Engineering 3 but taking up the general theory of alternating currents more thoroughly and treating the whole subject more completely. This course is intended for electrical engineering students only.

6. **Dynamo Design.**—Three credits; first semester; prerequisite, Mathematics 11, Physics 4 and Electrical Engineering 1, 2, 4 and 5 coordinately with this subject. In this course the student works out the design and makes drawings for a shunt or compound wound direct current generator or motor. The object of this course is to teach the theory of design of machines and to familiarize the student with the details and parts of the machine in relation to each other and to the machine as a whole.

7. **Electric Light and Power Distribution.**—Five credits; second semester; prerequisite, Mathematics 11, Physics 4, and Electrical Engineering 1, 4 and 5. A study of the costs of producing electric power, distribution and wiring, selection of lamps and light distribution, interior and street illumination, electrolysis and batteries, regulating and measuring apparatus, and as many other related subjects as the time will permit.

8. **Electric Traction.**—Five credits; first semester. Various features of electric car and train operation will be studied. Among these will be types of cars, motors and controlling apparatus, the operating characteristics of various types of equipment, power stations for this kind of service, transmission lines, substations, and distributing systems. A considerable portion of the time assigned for laboratory work in the subject will be given to the inspection of traction systems in actual operation upon which accurate and detailed reports will be required.

9. **General Principles of Electrical Engineering.**—Three credits. The course will consist of a mathematical treatment of the fundamental principles of electricity and magnetism, and the application of these principles of circuits, systems and machines in regular commercial use. In some ways the course will be a review of all the electrical work of the two preceding years, but for the most part the methods used will be quite different and much more comprehensive. The object of the course is to give the student a better perspective of the whole subject of applied electricity and to develop more direct methods for solving problems in this field.

10. **Electrical Design.**—Three credits; first semester; prerequisite, all the work required for the Bachelor's degree in this department. A study of the design of transformers, alternating current generators, induction motors, or some special kinds of apparatus, and the principles involved in the construction of the above.

11. **Power Stations.**—Five credits; second semester; prerequisite, Electrical Engineering 7 and 8. A study of the different types of stations, arrangement of boilers, engines, machines, switchboards and electrical apparatus, location of station with respect to distributing system; station operation and maintenance. A station design is worked out by the student and drawings of plans made, while according to circumstances, more or less of the laboratory time will be spent on experiments and tests relating to plant operation and control.

12. **Long Distance Transmission.**—Two credits; second semester; prerequisite, Electrical Engineering 1 to 7 inclusive. Study of long distance line construction, protective apparatus, switchboards, cut-outs, regulating devices, etc., as exemplified in the latest practice; study of recent construction and installations, and application of theory. Present theoretical and practical limitations to efficient and profitable distribution over large areas, and the possibilities of future development.

13-14. **Thesis.**—Two or three credits each semester. A complete investigation of some electrical subject or apparatus or the design of a machine or other electrical appliance, containing when possible the results of personal and independent observation. The subject must be selected early in the year (not later than November first), and reports concerning the progress of the work submitted from time to time, to the professor in charge.

CIVIL ENGINEERING

Professor Willis.

The course in Civil Engineering is designed to give to the

young men of the state a broad education in general and scientific subjects; to give them a thorough training in the principles underlying engineering in general, and as much special training as time will permit in those subjects belonging particularly to the field of the civil engineer. The following are some of the many lines of work open to the graduates in this course. Surveying and Mapping, Highway Construction, Railroad and Railway Construction, Bridge Designing, Structural Steel and Concrete Building Designing; Irrigation and Drainage, the design, construction and operation of Water Supply and Sewage Disposal Systems, and engineering work for city, county, state or national government.

The greater part of the time of the freshman and sophomore years is devoted to the fundamental studies which give both general culture and preparation for the technical work of the following years. The study of and practice in Physics, Mathematics, Chemistry, English and Public Speaking is carried on; and the work in Mechanical Drawing, Machine Shop and Machine Design is given. The theory of Plane and Topographical Surveying accompanied by field work and map drawing is begun in the freshman year and continued in the sophomore year.

Practically all of the time of the junior and senior years is devoted to purely engineering subjects, a large portion of which are given by the Civil Engineering Department. These subjects might be considered as falling naturally into three groups or divisions of civil engineering, namely: (1) Municipal Engineering, including the subjects of Surveying, Highway Construction, Hydraulics, Sanitary Engineering and Irrigation; (2) Railroad Engineering; (3) Structural Engineering and Building Construction, including the subjects of Graphic Statics, Stresses, Structural Details, Structural Design, Bridges, Dams and Reinforced Concrete. A working knowledge of the laws relating to engineering contracts and specifications is of great value to all engineers and a short treatment of this subject is given.

To aid in carrying on its work, the department is provided with suitable equipment, which includes transits, levels, plane table, solar attachment, sextant, current meter, plani-

meter, protractor, rods, tapes and various hand instruments.

Men completing the work of the four-years course in this department are graduated with the degree of Bachelor of Science (B. S.). Those completing the additional fifth year course of study are given the advanced degee of Civil Engineer (C. E.).

A detailed description of each subject offered by the department follows:

1. **Plane Surveying.**—Two credits; second semester. The theory and practice of land surveying, including United States land surveys, computation of areas, dividing land and determining heights and distances. Field work with level and transit in determination of heights and distances and in making surveys of farms. Preparation required: Plane Trigonometry and Mechanical Drawing. Text: Breed & Hosmer's Principles and Practice of Surveying.

2. **Plane and Topographical Surveying.**—Four credits; first semester; prerequisite, Civil Engineering 1. Continuation of Plane Surveying together with the theory and use of the plane table, and of the transit and stadia. Pen topography and detailed field work; the construction of topographic contour maps, leveling, triangulation and adjustment of instruments. Text: Breed & Hosmer's Principles and Practice for Surveying.

3. **Graphic Statics.**—Two credits; first semester; prerequisite, Mathematics 9, 10 and 16, General Physics 3. Shears and bending moments in beams, center of gravity and moment of inertia of cross sections, analysis of stresses in roof and bridge trusses, mill bents and three hinged arches by graphical methods. Text: Merriman and Jacoby's Roofs and Bridges, Part II.

4. **Highway Construction.**—Two credits; first semester. The location, construction and maintenance of country highways and city streets. Text: Blanchard and Drowne's Highway Construction. Seniors and juniors take this subject at the same time, and it is given in alternate years only. It will be given in 1917.

5. **Hydraulics.**—Three credits; first semester; prerequisite, Mathematics 11, 12 and 16, General Physics 3. Hydrostatics and Theoretical Hydraulics. The study of flow of water through orifices, tubes, pipes, over weirs, in conduits, canals and rivers; and application to engineering, water power plants and development. Text: Merriman's Hydraulics.

6. **Stresses.**—Four credits; second semester. Preparation required: Mathematics 13 and 16, and Graphic Statics. The theory and computation of stresses in roof and bridge trusses under dead, live and wind loads. Locomotive wheel loads on plate girders and

bridge trusses. Text: Merriman and Jacoby's Roofs and Bridges, Part I.

7. **Railroad Surveying.**—Three credits; second semester; prerequisite, Civil Engineering 1 and 2. Reconnoissance, preliminary and location methods, with theory of curves and turnouts. Location of a line, with the preparation of profiles and maps. The computation of earth-work and estimate of cost. Text: Allen's Railroad Curves and Earthwork. Seniors and juniors take this subject at the same time and it is given in alternate years only. It will be given in 1918.

8. **Structural Details.**—Two credits; first semester; prerequisite, Civil Engineering 3 and 6, Mechanical Engineering 15. Lectures on shop practice in making drawings and shop bills and in designing connections and other details for structural steel, including the design of beams, bearings, grillages, columns, struts and girders. Solution of problems required. Handbook: Carnegie Steel and Bethlehem Steel.

9. **Structural Steel Design.**—Three credits; first semester; prerequisite, Civil Engineering 3 and 6, Mechanical Engineering 15. The design and the making of general and detailed drawing of beams, columns, grillages, a roof truss, a plate girder railroad bridge and a riveted or a pin connected truss bridge. Reference Book: Conklin's Structural Steel Drafting and Elementary Design.

11. **Irrigation.**—Two credits; first semester; prerequisite, Civil Engineering 5. A study of the principles of irrigation engineering; namely, a consideration of fundamental questions underlying the design and construction of works for holding and controlling the waters needed for agriculture; and of those matters necessary to insure the financial success of the enterprise. Text: Newell & Murphy's Irrigation Engineering. Seniors and juniors will take this subject at the same time, and it is given in alternate years only. It will be given in 1918.

12. **Bridges and Dams.**—Four credits; second semester; prerequisite, Civil Engineering 3, 6, 8 and 9. Continuation of Civil Engineering 9 and a study of higher structures, including continuous, draw, cantilever and suspension bridges and metallic arches. The theory and design of masonry walls, dams and arches. Text: Merriman and Jacoby's Roofs and Bridges, Part IV.

13. **Contracts and Specifications.**—Two credits; second semester. Synopsis of the law of contracts as applied to engineering construction; study of typical contracts and specifications; riparian rights, boundary lines, survey descriptions, etc. Text: Johnson's Engineering Contracts and Specifications.

14. **Reinforced Concrete.**—Three credits; second semester; prerequisite, Mechanical Engineering 15 and 16, Civil Engineering 3, Mathematics 10 and 13. A study of manufacture and properties of

cement and reinforcing steel, and of the theory and design of plain and reinforced concrete construction. Text. Hool's Reinforced Concrete Construction, Vols. I and II.

15. **Sanitary Engineering.**—Three credits;; second semester; prerequisite, Civil Engineering 5. The study of the principles to be observed in order that a pure water supply, and an efficient system of sewerage may be secured, and a study of the design, construction and operation of municipal water supply and sewage disposal. This subject is taken by seniors and juniors at the same time and is given in alternate years only. It will be given in 1919.

16. **Steel Buildings.**—Three credits; first semester; prerequisite, Civil Engineering 8 and 9. Design and general drawings of steel mill, mine and high office buildings, and arches.

17. **Dam and Reservoir Design.**—Three credits; first semester; prerequisite, Civil Engineering 3, 5 and 15, Mathematics 10, 11 and 13. The study of modern hydraulic construction, dams, reservoirs, levees, etc. Structures relating to water power, canals and irrigation.

18. **Hydraulic Motors.**—Three credits; first semester; prerequisite, Civil Engineering 5. A study of reaction and impulse wheels; construction, regulation, testing sources of loss of energy. Text: Church's Hydraulic Motors.

19. **Railroad Engineering.**—Three credits; second semester. The construction of the roadbed, including ballast, crossties, rails, switches, culverts, maintenance of way and elements of railroad operation. Economic location, arrangement of yards, station and terminals. Train resistance. Application of electricity.

20-21. **Thesis.**—Two and three credits each semester. The thesis is intended to show the student's ability to apply the fundamental principles acquired in this course, in original investigation or design of some engineering structure, the student working independently and making regular reports showing the progress of the investigation or design to the professor having charge of the subject. The subject and plan of the work should be submitted to the professor in charge not later than November first of the current year.

ENGLISH

Professor Bates; Associate Professor Powers; Miss Young.

The aim of the department is two-fold: to train the student in the effective use of the English language in original composition, and to give him an intelligent appreciation of English literature.

For English 1 to 8, see the preparatory department.

9-10. **Rhetoric.**—Three credits each semester; prerequisite, the English of the preparatory department. The main purpose of this course is to familiarize the student with the principles of rhetoric and to enable him to use them effectively in composition. To this end, written work is demanded constantly, and is carefully criticised both in the class room and in conferences between the instructor and the individual student. The work is supplemented with reading, in the choice of which the student is allowed considerable latitude.

11-12. **English Literature from 1625 to 1798.**—Three credits each semester; prerequisite, English 9-10. This course consists in a study of the literature, exclusive of prose fiction, of the ages of Milton, Dryden, Pope, and Johnson. A large amount of reading and frequent papers are required. Attention is paid, in lectures, to literary movements and the relation between literature and other phases of the life of the time.

13-14. **English Literature from 1798 to 1892.**—Three credits each semester; prerequisite, English 11-12. This course covers the literature, exclusive of prose fiction, of the ages of Wordsworth and Tennyson. Much reading and occasional papers are required. Lectures are given on nineteenth century writers and literary movements, together with their relation to other phases of the life of the time. Frequent conferences are held between the instructor and the individual student.

15. **English Literature, exclusive of Drama, from the Beginnings to 1625.**—Three credits; first semester; prerequisite, English 13-14. In this course special stress is laid on ballad and epic, Chaucer, and the development of the language.

16. **English Drama from the Beginnings to 1625.**—Three credits; second semester; prerequisite, English 15. Shakespeare and his contemporaries receive the main emphasis.

17-18. **Scientific and Social Ideas in Recent Literature.**—Three credits each semester; prerequisite, English 9-10. The aim of this course is to familiarize the students in the technical departments with some of the main scientific and social tendencies of the present time as these tendencies are mirrored in current and late nineteenth century literature in England and America. Frequent papers and oral class reports are required.

19-20. **The English Novel.**—Three credits each semester; prerequisite, English 11-12. This course deals with the development of the novel from the middle of the eighteenth century to the end of the nineteenth.

MODERN LANGUAGE

Professor Spencer; Miss Schneider; Mr. Mahany.

A good reading knowledge of some modern language is imperative for students pursuing work along scientific, technical or historical lines, and they are indispensible as literary and cultural subjects.

In the General Science, the Home Economics and the Agricultural Courses of the College, either French, German or Spanish is required during the freshman and sophomore years. Elective work in this department is offered and the student is strongly advised to take a third year if possible of the language chosen. In the second year German a special division reads scientific German.

1. **German.**—Four credits; first semester. German grammar and composition; reading and telling short stories for practice in speaking German; memorizing selected poems. Text: Thomas's Grammar.

2. **German.**—Four credits; second semester. Continuation of German 1. Texts: Storms' Immensee; Auerbach's Brigitta.

1a. **German.**—Four credits; first semester. More advanced work in grammar and composition, and story telling, than in German 1. Constant practice in speaking German, and reading and memorizing of German poems. Texts: Immensee, Geschichten von Rhein; Thomas's Grammar.

2a. **German.**—Four credits; second semester; continuation of German 1a. Constant practice in speaking German; memorizing poems and selected passages. Text: William Tell.

3. **German.**—Four credits; first semester. Prose and poetry of the last century; composition and conversation; memorizing of selected poems. Text: Geschichten von Deutschen Staedten.

4. **German.**—Four credits; second semester; continuation of German 3. Text: Schiller's William Tell. Additional reading and composition.

5. **German.**—Three credits; first semester. Written and oral composition, and readings such as Freytag's Journalisten and Goethe's Hermann und Dorothea.

6. **German.**—Three credits; second semester. Goethe's life and works; Goethe and Schiller; or Wenckebach's Meisterwerke des Mittelalters, with collateral reading.

FRENCH

1. **French.**—Four credits; first semester. French grammar and composition. Thorough drill in pronunciation; reading and practice in speaking begun very early. Text: Fraser and Squair's Grammar.

2. **French.**—Four credits; second semester. Continuation of French 1. Dictation exercises, memorizing of selected passages, conversation. Text: Super's Reader; Le Tour de la France par deux Enfants.

3. **French.**—Four credits; first semester. Readings from nineteenth century writers; Koren's French composition.

4. **French.**—Four credits; second semester. Continuation of French 3. Advanced composition and conversation.

5. **French.**—Three credits; first semester. Corneille, Racine, La Fontaine; their lives and works; their influence on their contemporaries; the literature and society of their time.

6. **French.**—Three credits; second semester. Open to those who have completed French 5. Moliere and Voltaire; their lives and writings; their influence on French and English thought.

SPANISH

1. **Spanish.**—Four credits; first semester. Spanish grammar and composition. Rules of pronunciation and construction. Text: DeTornos' Combined Spanish Method.

2. **Spanish.**—Four credits; second semester. Continuation of Spanish 1. Vocabulary of every day life emphasized.

3. **Spanish.**—Four credits; first semester. Completion of all verb forms. Practice in connected speech. Selected readings from modern authors.

4. **Spanish.**—Four credits; second semester. Conversation on practical topics. Reading of Spanish newspapers and periodicals.

HISTORY AND POLITICAL SCIENCE

Professor Harding; Assistant Professor Young.

The aim of this department is to introduce the student to such studies as may enable him to deal with economic problems and to fulfill his social and political duties; to develop in him the power to use critically and constructively the historical method, and especially to awaken in him an interest in the great field of history and political science and an enthusiasm for personal individual effort. Constant endeavor is made to teach the practical application of the social, political

and economic experiences of the race to the problems of modern life.

The text-book is supplemented by lectures and class discussions based upon assigned readings or the original work of students. Students are encouraged in every way to make use of the College library, which is the tool house of this department.

For History 1 to 6, see the preparatory department.

7. **Modern History.**—Three credits; first semester. Political and social history of Europe from 1500 to 1815. A survey of sixteenth century Europe, dynastic and colonial rivalry. European society and governments in the eighteenth century, the French Revolution and the era of Napoleon. Lectures, text-book, readings, papers and reports. Text: Hayes Political and Social History of Modern Europe, Vol. I.

8. **Modern History.**—Three credits; second semester. Continuation of History 7. History of Europe from the Congress of Vienna to the outbreak of the war of the nations, 1914. The era of Metternich, the growth of democracy and nationalism, the United Kingdom, Latin Europe, Teutonic Europe, the Russian Empire, the Eastern question, social factors in recent European history, national imperialism, international relations 1871-1914, and the outbreak of the great war. Text: Hayes Political and Social History of Modern Europe, Vol. II.

9. **American History.**—Three credits; first semester; prerequisite, History 7 and 8. A study of constitutional and political development from 1783 to 1829. Lectures, library work, reports, and careful study of assigned sources.

10. **American History.**—Three credits; second semester. Continuation of History 9. The constitutional and political history of the United States from the beginning of Jackson's administration to the Civil War.

11. **American Government.**—Three credits; first semester. General survey of federal, state, and local governments in theory and practice. Emphasis in this course is placed upon real governmental operations. Text book, discussions, and reports. Text: Young's New American Government.

12. **Political Parties and Practical Politics.**—Three credits; second semester. This course considers such topics as the characteristics and importance of parties, nominating methods, party machinery, campaign methods, party finance, educational and other suffrage qualifications, election laws, the spoils system, civil service reform, machines and bosses, practical politics in legislative bodies, state and local politics, and remedies for legislative evils. Text-

book, discussions and reports. Ray's Political Parties and Practical politics.

13. **Economics.**—Three credits; first semester. A study of the fundamental laws of economic science. Text-book, supplemented by lectures on special subjects and assigned readings.

14. **Sociology.**—Three credits; second semester. The fundamental principles of social science. Text-book, supplemented by lectures and special reports. Text: Blackmar and Gillin's Outlines of Sociology.

15. **Rural Sociology.**—Two credits; first semester. A general survey of the field of rural sociology, including the following topics: Types of communities, movements of population, advantages and disadvantages of farm life, social conditions and life of rural people, rural health and sanitation, the various social institutions of the rural community, boys' and girls' clubs, farmers' clubs, the grange, the rural church and the rural school, an analysis of the fundamental problems of rural life; the country life movement and the reorganization of rural social forces. Text book, readings, and reports. Text, Gillette's Constructive Rural Sociology.

16. **Rural Economics.**—Three credits; second semester. The economic elements in the production and distribution of agricultural wealth, the agricultural market, determination of price, speculation, business co-operation, credit facilities, ownership and tenancy, farmers' organizations, the farmer and legislation, problems of rural social life, the relation of the farmer to the state. Text-book, lectures, readings and reports.

PUBLIC SPEAKING

Professor Brown.

To meet the ever increasing demands of the spoken word as a factor in leadership, and to develop skill in interpretative reading, the following courses are offered:

1-2. **Literary Interpretation.**—Three credits each semester. Voice training, bodily expression, oral interpretation and analysis of the lyric and drama. The aim of this course is to gain a keener appreciation of imaginative literature and to render it naturally and effectively.

3-4. **Extempore Speaking.**—Two credits each semester. For agricultural and general science students. Student trained to think and express himself while on his feet. Criticism on the organization and presentation of material. Attention is given to gesture, voice and such elements of grace as are essential to effective speaking. (Two sections.)

3a. **Extempore Speaking.**—Two credits; second semester. Same work as 3. Required of home economics students.

5-6. **Extempore Speaking.**—Two credits; first and second semester. Required of Engineering students. Same work as 3-4.

7. **Argumentation and Debate.**—Three credits; first semester. A study of the problems underlying conviction and persuasion. Analysis and briefing of public questions. Development of briefs into forensics and drill in their vigorous presentation. This course is especially recommended to those students who may be looking forward to taking part in intercollegiate debating.

8. **The Speech for Special Occasions.**—Three credits; second semester. A study of form for the special occasion, the speech of the president, the commemorative speech, the speech of dedication, of acceptance, of response, the speech of welcome. In addition to extempore work, written speeches will be required.

9-10. **Public Address.**—Two credits each semester; prerequisite, Public Speaking 3-4. The Rhetoric of Oratory. A study and presentation of the various forms of public address. The writing and delivery of orations. Attention to those elements of psychology which are basic in public speaking.

11-12. **Elementary Public Speaking.**—Four credits each semester. Articulation and flexibility of voice. The study and reading aloud of short poems, extracts from speeches for the development of ease and confidence. Extempore Speaking. Open to the pupils of the School of Agriculture. Elective in the junior or senior year.

EDUCATION

Professor Brady.

The State College receives numerous requests from school officials for teachers for various types of positions. The demand for *Manual Training teachers, Principals and Superintendents of Agricultural and Industrial High Schools, teachers of Home Economics (Domestic Science and Domestic Art), teachers of Agriculture, and Scientific positions in general—who have professional training in public school matters—is greater than the supply. It is the function of the Department of Education to equip young men and women who are preparing themselves for teachers with professional training for their work. A student desirous of securing the State Certificate of South Dakota can do so by electing fifteen hours work

in the Department of Education (not omitting Educational Psychology, Principles of Teaching, and History of Education). The courses in Education are planned to give a clear grasp of the organization and administration of public education with special emphasis on the present theory and practice in educational procedure The purpose is to make all courses concrete and practical.

*There is a large demand in the High Schools of the northwest at the present time for teachers of manual training in connection with other subjects. Students expecting to teach manual training should complete the following work in Mechanical Engineering; Woodwork, six credits, Mechanical Drawing, three credits, and Forging, two credits.

1. **General Psychology.**—Three credits; first semester. The structure and function of the nervous system; discussions of the several phases of the mental processes with special emphasis upon their origin and functions, and their application to educational development. Lectures, assigned readings, demonstrations and experiments.

2. **Educational Psychology.**—Three credits; second semester. A systematic course treating of fundamental laws of learning in animals and man, the effect of practice, the rate and limits of improvement, the conditions for the most economical learning, the measurement of progress in school subjects, mental hygiene and fatigue, the transfer of training, etc. Lectures, recitations, required readings, experimentation.

3. **History of Education.**—Three credits; first semester. A consistent survey of such periods in the history of educational progress as will serve in the interpretation and solution of our present day problems.—Education in a non progressive versus a progressive society.—The rise of individualism in education, state control and public systems; evolution of modern high schools, the elementary school, the kindergarten, vocational education, education of women, the training of teachers; foundations for the scientific, psychological and sociological tendencies of our present day education; the effects of the disciplinary and humanistic conceptions upon educational progress; the contributions to educational theory by Luther, Melancthon, Pestalozzi, Herbart, Froebel, Horace Mann, Spencer, Dewey and others. Lectures, recitations, assigned readings, discussions.

4. **Principles of Teaching.**—Three credits; second semester. An application of the principles of Psychology to the technique of instruction; observation of the application of these principles in the practice school; discussions of various types of lessons, the various aims and principles of the teaching process, physical welfare of

children, moral training, discipline, lesson plans, supervision and its purposes, examinations, etc. Lectures, readings, observations, reports.

5. **School Administration.**—Three credits; first semester. Organization and Administration of Public School systems in the United States. Measurement as a modern scientific instrument of supervision and administration. A brief introduction to statistical method, frequency tables, the application of scientific forms to the measurement of school achievement; fundamental bases for organizing school children, retardation, acceleration and elimination; grading and promotion; special classes; home work; medical inspection; extension of the school activities; special modifications of the course of study; discipline; compulsory education; responsibility of the schools to the public; comparative systems of education both local and foreign. Lectures, discussions, assigned readings, reports.

6. **Educational Sociology.**—Three credits; second semester. A study of the modern social demands for the re-organization of school systems, of methods of teaching, of courses of study, of the professional training of teachers, and of school equipment. The origin and growth of public sentiment, its importance and influence on social control. Some concrete studies of the principles of interdependence between the school as an institution, and modern social needs as exemplified in recent school survey movements. Some surveys which will receive attention are Minneapolis, Portland, Butte, New York City, Seattle, Bloomington, Ohio, etc. Lectures, discussions, problems and assigned readings.

7. **Educational Measurements.**—Three credits; to be given as demanded. A study of the more recent psychological and pedagogical methods and tests in the measurements of mental and physical development and their bearing upon educational progress. Attention will be given to individual differences in vital capacity, nutrition, growth, sensory and motor discrimination and control, fatigue, blood pressure, attention and association tests, visual and auditory acuity, dermal consciousness, etc. Attention will also be given to standard tests in arithmetic ability, for pedagogical age of intelligence, standards in handwriting, scales in composition and others.

8. **Supervision and Practice Teaching.**—Eight credits; one year course, four periods per week. A careful study of the best pedagogical literature upon the subject taught. Daily lesson plans, carefully criticised then followed by teaching. Daily practice and observations in the class room with full charge of a class under competent supervision. Offered only to seniors who have completed practically twelve hours in Education. Elective in the senior year.

AGRICULTURAL JOURNALISM AND ADVERTISING

Professor Starring.

The following introductory courses in agricultural journalism are designed to assist prospective rural leaders in writing entertainingly and helpfully upon subjects in which they are interested. News values, fact values, and proper emphasis on them are matters of prime importance. The need of training in agricultural advertising is also apparent to the prospective farmer who intends to receive the greatest cash return from his efforts. The course will be especially helpful to those who become public servants as teachers, county agents or specialists, for they will be expected not only to prepare many articles for publication, but also to assist others with advertising and sales problems.

1. **Elements of Agricultural Journalism.**—Two credits; first semester; for seniors. A study of the news style of writing. Lectures on newspaper style as a model in effective writing. Lectures on methods of preparing copy for agricultural and technical journals. Practice in writing agricultural news for publication.

2. **Agricultural Advertising.**—Two credits; second semester; for seniors. The principles of advertising. Use of language, type, and media to assist in selling agricultural products. Writing of sale bills. Planning and arranging sale books. Use of illustrations. Design of farm letterheads. Composition of effective sales correspondence. Advertising farm meetings, county fairs, etc.

3. **Journalism For Women.**—One credit; second semester; for senior girls in home economics. Writing upon home economics subjects for farm papers and women's journals. Method of study similar to course 1.

MATHEMATICS

Professor Brown; Assistant Professor Mills.

The general work of this department is planned to cultivate habits of systematic and accurate thinking, as well as facility in making calculations. Independent effort is encouraged to the greatest possible extent, the solutions of problems

and original demonstration forming an important part of each course.

A course in the theory of teaching mathematics may be given in case a sufficiently large number desire it.

For Mathematics 1 to 7, see the preparatory department.

8. **College Algebra.**—Three credits; first semester; prerequisite, Mathematics 4. Graphs, permutations and combinations, complex numbers, elementary theory of equations, determinants, partial fractions.

9-10. **Plane and Spherical Trignometry.**—Two credits each semester; prerequisite, Mathematics 6. The elementary notions of trigonometry; solutions of triangles.

11. **Analytic Geometry.**—Five credits; first semester; required in the Engineering Courses, sophomore year; prerequisite, Mathematics 8 and 9.

12. **Calculus.**—Five credits; second semester; prerequisite, Mathematics 11. Continuation of Mathematics 11.

13. **Calculus and Analytic Mechanics.**—Five credits; first semester; prerequisite, Mathematics 12. The application of analytic geometry and calculus to the solution of mechanical problems.

14. **Analytic Mechanics.**—Three credits; second semester. Continuation of Mathematics 13.

15. **General Astronomy.**—Three credits; second semester; prerequisite, elementary mathematics. The text will be covered and frequent use made of the instruments.

16. **Elementary Mechanics.**—Two credits; second semester; prerequisite, Mathematics 8 and 9.

PHYSICS

Professor Mathews. Associate Professor Hoy.

From the fact that physics is one of the foundation sciences and that a knowledge of its laws is necessary to every student seeking a scientific training, the department has been well fitted with rooms and appliances to provide this training. Its lecture rooms are well provided with arm-rest opera chairs. The laboratories are well lighted and provided with non-vibratory piers. Water, gas and electricity are furnished for the recitation rooms and the dark room and laboratories.

This department is housed in the engineering and physics building. Its facilities and equipment for instruction are equal to those of any in the Northwest.

The laboratory equipment includes such expensive pieces as analytical balances, laboratory clock making electrical contact every second, cathetometer, spectroscopes, miscroscopes, photometers, stereopticon (arc light), standard cells, dynamos, electrometers, transformers, galvanometers, storage batteries, induction coils, ammeters, magnetometers, voltmeters, wattmeters, Wheatstone bridges, polariscope, quadrant electrometer, Kelvin's current balances, lathe and wireless telegraphy and X-ray apparatus.

The following subjects are offered in this department:

For Physics 1 and 2, see the preparatory department.

3. **General Physics.**—Five credits; first semester. Young ladies following the General Science Course may elect Home Economics 4 and 7 instead of Physics 3; prerequisite, Physics 2 and Mathematics 9. Mechanics of solids and fluids, heat and sound with numerous examples. Exact measurements of mass, distance, time, calorimetry, nature and velocity of sound, etc.; study of electrical and magnetic fields.

4. **General Physics.**—Five credits; second semester. Electricity and its applications in the dynamo, motor and transformer, electric light and study of electrical and magnetic fields; refraction and reflection of light, interference and color. Laboratory work on topics mentioned.

5. **Advanced Physics.**—Four credits; first semester, prerequisite, Mathematics 12 and Physics 4. Mechanics, kinematics, kinetics, mechanics of fluids and heat and its application; magnetism, static electricity, electrolysis. Laboratory work and measurements covering topics mentioned. Texts: Nichols and Franklin, Vols. 1 and 2; Nichols' Laboratory Guide.

7. **Heat.**—Four credits; first semester; prerequisite, Physics 5. Sensible and latent heat, dynamical generation of heat, thermometry, calorimetry, specific heat, atomic and molecular heat capacities, evaporation, ebullition, vapor densities, cooling, diathermancy, conductivity, and dynamical equivalent of heat, laboratory work covering topics mentioned.

8. **Light.**—Four credits; second semester; elective to the same classes as Physics 7, of which it is a continuation. Shadows and images, spectrum, velocity of light, color, phosphorescence, fluorescence, diffraction, measuring waves, prisms and polarization; laboratory work.

9. **Household Physics.**—Three credits; first semester; prerequisite, Mathematics 4. Especial emphasis is laid on practical applications of heat, machines, electricity, etc., in the home.

10-11. **Practical Physics.**—Three credits; first and second semesters. This course is open to students in the agricultural groups. The general subjects discussed in physics will be considered but special emphasis will be placed upon topics of practical interest and upon practical application of physical principles.

BOTANY AND PLANT PATHOLOGY

Professor Michel; Mr. Petersen.

In the work of this department, the structure, physiology, classification and pathology of plants, and the fundamental problems of cell structure and function are studied, as well as the direct application of botanical science to pharmacy and agriculture. This work also helps to serve as a foundation for courses in forestry, plant breeding, plant pathology, etc.

This instruction aims primarily to develop the powers of accurate observation and the ability to draw correct conclusions.

Both the elementary and advanced laboratories are well equipped with miscroscopes and other necessary apparatus for carrying on advanced or original research work. The department also has fairly complete, convenient herbaria of the flowering plants and fungous flora of the northern United States.

2. **General Botany.**—Four credits; first semester; prerequisite, the work of the freshman year. The general principles of biology as illustrated by plants; a study of the life histories of types of plants, including their physiology and systematic relations.

3. **General Botany.**—Four credits; second semester; prerequisite, Bontany 2.

4. **Plant Physiology.**—Four credits; second semester; prerequisite, Botany 2 and 3, Chemistry 11. This course deals with the life processes of plants, such as photosynthesis, respiration, fermentation, transpiration, irritability, nutrition, growth, and reproduction; and how these processes are influenced by changes of environment, such as differences in amount of moisture in air and soil, amount of light, and effects of nutrient and injurious salts in the soil, etc.

5. **Plant Pathology.**—Four credits; first semester; prerequisite, Botany 2 and 3. The first part of the term is devoted to the cause, nature and classification of the fungi, special emphasis being placed on the organisms of economic importance; the latter part of the course is devoted to the morphology of the diseases and their control, especially those found in South Dakota. In the laboratory work the student is, as far as possible, brought into direct contact with the diseases as found in the field.

6. **Advanced Plant Pathology.**—Elective in the junior or senior year. The course will be given to such students as have had Botany 5 or equivalent work. The laboratory hours and the recitations to be arranged with the instructor. The number of credits will depend upon the amount of time given to the work, which will consist of individual laboratory work and assigned readings.

7. **Classification of Pteridophytes, Gymnosperms, and Angiosperms**—Four credits; first semester; prerequisite, Botany 2 and 3. The classification of ferns, conifers, and flowering plants. Especial attention will be given to plants of economic importance in South Dakota; such as trees, grasses, weeds and poisonous plants. A number of field trips will be made during the fall. Part of the laboratory work may be done by making a collection of plants during the summer.

8-9. **Plant Histology.**—Four credits each semester; prerequisite, Botany 2 and 3. The work will consist of the embedding, sectioning and staining of tissues from the various groups of plants. Textbook: Chamberlain's Methods in Plant Histology.

10. **Heredity.**—Three credits; second semester. The work is offered in connection with the Department of Horticulture, which will give practical work along the line of plant breeding. This course deals with the principles of variation and heredity, and their bearing upon the theory of organic evolution. The first part of the semester will be devoted to the general principles of heredity and their application to man, the latter half will deal with plant breeding and its practice in this state. Texts: Castles' Genetics & Eugenics and Bailey's Plant Breeding.

12. **Economic Botany.**—(Weeds and Poisonous Plants.)—Three or four credits; second semester. A study of our common weeds; their methods of reproduction and disposal, methods of eradication, significance of dormancy and longevity of seeds, determination of weed seeds especially such as are found in grass and grain seed. In the spring seeds will be planted and the seedlings studied. Students intending to take this course should make a collection of weeds and weed seeds in the summer or fall.

ZOOLOGY AND RURAL SANITATION

*Professor Miller; Mr. Miller; Mr. Nelson.

Students of Agriculture and Domestic Science as well as those of General Science, should have a thorough foundation in the principles of Animal Biology, and this is what the department aims to accomplish. Besides this it trains the students in methods of zoological research and technique, and attempts to develop original and independent thought.

Students who contemplate the study of human or veterinary medicine will find that it is to their advantage to elect advanced work in the department. These professions are biological sciences and one should have a most thorough training to enter them. For those courses which are the so-called pure scientific courses in medicine credit is usually given and the student is privileged to elect other work in the professional school.

The department is well equipped with apparatus for the courses offered. Microscopes, type specimens, skeletons, for the general course, microtomes, ovens, glassware, stains and reagents for the advanced work furnish as excellent equipment as one would wish. There is a small but well chosen working library of about two hundred volumes.

For Zoology 1 and 2 see the Preparatory Department.

3-4. **General Zoology and Physiology.**—Four credits each semester; prerequisite, Art 1 and all the subjects below the sophomore year.

a. **General Zoology.**—A study of type forms of invertebrates and vertebrates, and the elements of histology and embryology. Texts and references: Galloway's Zoology; Parker & Haswell; Hertwig's Text Book of Zoology.

b. **Physiology.**—This subject continues throughout the last half of the second semester. Lectures, recitations, demonstrations, and required readings in advanced human physiology. Texts and references: Pearce & McCord's Physiology; Howell's Physiology.

5-6. **Anatomical Methods.**—Four credits each semester. This subject is intended to acquaint students preparing for the study of medicine with anatomical nomenclature, and methods of dissection.

*Absent on leave during 1916-17.

It includes the study of the anatomy of the cat, with special reference to Physiology. Texts: Davidson's Mammalian Anatomy; Riegart and Jennings' Anatomy of the Cat; Morris' Human Anatomy; Grays-Piersol's Anatomy.

7-8. **Histology.**—Four credits each semester; prerequisite, Zoology 3 or 5. The structure of the cell and the tissue elements, together with michotechnique during the first semester; vertebrate organology, the microscopic structure of vertebrates during the second semester. Texts and references: Bohm-Davidoff's Text-Book of Histology; Wilson's The Cell; Stohrs and Szymonowiezs- MacCallum's Text-Book of Histology.

9. **Vertebrate Embryology.**—Three or four credits; first semester. This course includes the study in the laboratory of the processes of fertilization, cleavage, principles of growth, formation of the germ layers and the foetal membranes, as well as the study of the development of some system of organs. For four hours credit the student must prepare a series of microscopical preparations of at least four stages of trout, chick and pig embryos, and make a model of the development of some organ. Students electing this course must have completed Zoology 3 and 4 or 5 and 6, or equivalent. Prentis-Human Embryology; Hertwig's Embryology; Man & Mammals.

10. **Bacteriology.**—Four credits; first semester. The course includes the study of morphology and biology of the bacteria and special reference is made to Public Health. The laboratory work consists of technique and the study of several of the common forms of bacteria. Text: Jordan. References.

11. **Applied Bacteriology.**—Four credits; either first or second semester. Class conferences twice a week. Laboratory work on methods of air, water and soil determination.

12. **Comparative Anatomy.**—Three or more credits; second semester. A comparative study of the skeletal, digestive, vascular, nervous and unorgenital systems of the vertebrate. For five hours credit, the student must make a comparative study of the development of some system in three groups, and make models.

ENTOMOLOGY AND NATURE STUDY

Professor Severin; Mr. Gilbertson.

The work of this department is conducted by means of lectures, recitations, laboratory and field work. The student is thus afforded not only an opportunity to gain familiarity with the principles and theories discussed in the class room, but is also encouraged to put these theories to the test and verify the

principles in the field. In the way of illustrative material, in addition to the general museum and the entomological collections, the department is provided with a large number of lantern slides, microscopic slides, alcoholic and formalin preparations, as well as samples of insecticides and fungicides, spray machinery and accessories, and other apparatus used in combatting insects. The department is well provided with all the apparatus necessary for biological work.

For Entomology 1 and 2, see the preparatory department.

3-4. **General Entomology.**—Two credits first semester, three credits second semester. A general course dealing with the anatomy, physiology, embryology, behavior, classification and life history of insects. The work of the second semester will be devoted in part to a discussion of some of the more important insect pests and methods of controlling them. This course is designed as an introduction to the practical work in economic entomology offered in courses 5 and 6 and to the systematic work offered in courses 7 and 8.

5-6. **Economic Entomology.**—Three credits each semester; prerequisite, Entomology 3 and 4. A detailed study in the field and lecture room of the chief economic species of insects with a study of insecticides, spraying machinery and other apparatus used in combatting insects. The student will be given an opportunity of preparing sprays and gases used in combatting insect pests, and demonstrations will be offered in the practical application of the insecticides. Each student will be required to work out the life history of three species of insects that are of economic importance and to mount these in exhibit cases.

7-8. **Systematic Entomology.**—Two or more credits each semester. This course, while primarily entomological, is designed to be of general use to students of biology. It has for its object not only to get the student acquainted with the more common forms of insect life, but is also designed to give the student an idea of the aims and methods of classification. Each student will be required to do his own collecting and mounting of insects; the collections of the department will be available to the student at all times for reference work.

9. **Household Pests.**—Three credits; second semester. The household insects and other animals that are of economic importance will be especially emphasized in this course, together with methods of extermination.

10. **Medical and Veterinary Entomology.**—Two credits; first semester. The greater share of the semester will be devoted to a discussion of the diseases which are disseminated through insects and which affect man and domestic animals.

11. **Bird Study.**—Three credits; second semester. The lectures will deal with the various phases of bird life; the laboratory periods are designed to acquaint the student with the anatomy of various types of birds, while the field work will be devoted to studying the birds as they are found in the field, particularly with reference to their field identification, feeding and nesting habits. Each student should provide himself with a field or opera glass and a copy of Florence Merriman Bailey's Handbook of Birds of Western North America.

12. **Nature Study.**—Three credits; first semester. This course is intended primarily for those who expect to teach in the public or high schools. Its object will be to give the nature point of view and the course will be a discussion of methods and materials as well as an elementary science treated from the biological side.

13. **Animal Behavior.**—Two credits; first semester. The evolution of animal behavior forms the principal theme of this course and is of much significance for the study and correct understanding of human psychology and sociology. This course will be useful to those engaged in educational work.

14. **Beekeeping.**—Three credits; first semester. Especial emphasis will be placed upon the practical side of Beekeeping in this course. The laboratory work will deal with a study of Apiary methods, including the manipulation of bees, spring management, swarm control and increase, production of extracted and comb honey, care of bees in winter, apiary apparatus and the anatomy, physiology and development of bees.

CHEMISTRY

Professor Shepard; Associate Professor Dunbar; Assistant Professor Binnewies; Mr. Sherwood, Mr. Serles; Mr. Rowe.

This department is equipped with the latest and most approved appliances for instruction.

The student upon begining the subject is assigned a desk in the main laboratory. This desk is supplied with a set of reagent bottles, gas and water fixtures. In addition to these a supply of all needful apparatus, such as test tubes, generating flasks and the like, is furnished. The main laboratory, which is located on the first floor of the Chemistry and Pharmacy Building, accommodates one hundred and twenty students, all working at the same time.

Upon completing the necessary elementary work the student now finds a quantitative laboratory at his disposal. This laboratory accommodates sixty students working together. It is supplied with all quantitative apparatus, such as precipitation flasks, desiccators, lamps and crucibles.

In connection with the quantitative laboratory is a balance room supplied with high grade Troemner quantitative balances. The work is so planned that the student has laboratory work together with didactic instruction throughout the course.

The organic laboratories are capable of accommodating eighty students and are equipped with a large assortment of apparatus especially fitted for this branch of chemical science, which today forms so important a part of the prospective chemist's education.

The experiment station laboratories are also located at this College, and their costly and technical appliances and the practical work in constant progress there are within reach for instruction.

1. **Elementary Inorganic Chemistry.**—Four credits; first semester; prerequisite, Physics 2. History of Chemistry, elements, compounds, symbols, valence, atomic weights, chemical equations, oxygen, hydrogen, nitrogen, chlorine, bromine, fluorine, iodine, sulphur, phosphorus, silicon and their compounds. Bases, salts, acids, and alkalies. The metals and their compounds, separation of metals, groups of metals and uses of their compounds. Detection of the non-metallic elements and their compounds. Text: Shepard's Elements of Chemistry.

2. **Elementary Inorganic Chemistry.**—Four credits; prerequisite, Chemistry 1. This semester is devoted to a study of the metals, their occurrence and commercial production from the ore, they being studied from the viewpoints of industrial use and the identification by analytical processes of the metal ions; and the working of a list of unknowns. Text: Shepard's Elements of Chemistry.

3. **Quantitative Chemistry.**—Three credits; second semester; prerequisite, Chemistry 1 and 2. The apparatus and its uses. Explanations of methods of quantitative determinations and reports of students' analyses. The quantitative analyses of typical chemical compounds, e. g., calcite, magnesium sulphate, metallic ores, the first half of the work being gravimetric and the latter half, volumetric. Text: Olson's Quantitative Chemistry.

4. **Chemistry and Physiology of Foods.**—Four credits; second semester; prerequisite, Chemistry 1 and 2. Food nutrients, chemical

characteristics and offices of same, physiology of same, metabolism, balanced rations, standard dietaries. Study of food adulterations. Experiments in digestion of foods, offices of digestive secretions. Detection of adulterants, coloring matter and preservatives. Lectures and laboratory exercises.

5. **Agricultural and Sanitary Analysis.**—Four credits; first semester; elective in the junior or senior year; prerequisite, Chemistry 1, 2 and 3. Analysis of disinfectants, germicides, water-analysis, etc. Lectures, Official Methods American Association of Official Agricultural Chemists.

6. **Agricultural Chemistry.**—Three credits; second semester; prerequisite, Chemistry 1, 2 and 3. Text: Johnson's Agricultural Chemistry.

7. **Industrial Chemistry.**—Three credits; first semester; prerequisite, Chemistry 1, 2 and 3. Chemistry of manufacturing glass, paper, sugar, petroleoum, explosives, acids, water, air, mortars, pigments, photography, alkalies and gases. Demonstrations of examples, including water pollution, purification, artificial illumination, petroleum, testing fermentation, air contamination, disinfection, ventilation, bleaching and dyeing. Text: Thorpe's Industrial Chemistry.

8. **Household Chemistry.**—Four credits; first semester; required in the sophomore year of the Home Economics Course; prerequisite, Chemistry 1 and 2. Students in four years Home Economics Course intending to specialize in Chemistry should take Chemistry 3 instead of Chemistry 8. This course includes the chemistry of cooking, baking, fermentation, cleansing agents, water, soaps, inks, stains, disinfectants, preservatives, etc., as applied to good housekeeping in every day life. Lectures, notes and references. Text: Snell's Elements of Household Chemistry.

9. **Organic Chemistry.**—Five credits; first semester. The Aliphatic compounds. Chemical theory and principal compounds of the paraffine series. The preparation of typical members. Typical analytical methods. Text: Norris' Organic Chemistry with explanatory lectures.

10. **Organic Chemistry.**—Five credits; second semester; a continuation of Chemistry 9. Theory, structure, preparation and analysis of the Benzenes, Naphthalenes, Anthracenes, Pyridines, Alkaloids, Amino Acids, Terpenes, Dyes, etc.

11. **Organic Chemistry.**—Four credits; first semester; prerequisite, Chemistry 1 and 2. An elementary course in Organic Chemistry. Includes the general theories, and typical reactions of the aliphatic and aromatic compounds. Preparatory to the practical application of this knowledge in advanced agricultural work. Textbook: Norris' Organic Chemistry.

PHARMACY

Professor Whitehead; Mr. Serles.

PURPOSE

The purpose of this department is to train young men and women in the science of pharmacy. The passage of the Food and Drug Act by Congress, and similar legislation by our own state has placed very great importance on pharmaceutical education. Under the present commercial conditions it is nearly impossible for one to prepare himself to meet the requirements of these laws except by taking a thorough college course.

The demand for educated pharmacists is becoming greater every day. In fact, even at present, some of the states will not allow one to take the examination for registration unless he is a graduate of a reputable school. This department meets both the preparatory and professional requirements of the New York Educational Department with which it is registered in full. It is also a member of the American Conference of Pharmaceutical Faculties.

Graduates from the Department of Pharmacy in the State College have been uniformly successful in passing the State Board examinations, only two having failed to meet the requirements of the Board during the past nineteen years.

Among the regulations of the South Dakota State Board of Pharmacy is the following:

"Hereafter during the year 1906, all applicants appearing for registration by examination, must present with their application an affidavit showing that they have completed a course of study (or its equivalent) of one year high school work. In 1907, two years; in 1908, three years, and in 1909 the presentation of a high school diploma will be required. These requirements were recommended by the Association in annual meeting at Canton in 1903. It is therefore expedient that all proprietors doing a drug business in this state acquaint their clerks and apprentices with the above rule."

In order to harmonize our work with this regulation we require the completion of four years of high school work or its equivalent. While this is a much higher requirement than most schools demand, we feel that the results have justified our judgment, for at present there are but two of our graduates who have taken the state examination who are not registered.

This line of work offers many inducements to young men. The requests of the druggists of the state for our graduates are far in excess of the supply and the pure food and drug laws have opened up a new field for young men who are competent drug and food assayists.

The students finishing the two year course in Pharmacy may receive the degree of Pharmacy Graduate (Ph. G.) This is the only course of the kind offered in the state and receives the hearty commendation of the State Board of Pharmacy. The two years of pharmacy work may all be applied towards the degree of Bachelor of Science. For the additional subjects required, see Pharmacy Schedule. This longer course is recommended to those who intend to take up the study of medicine or dentistry, or who wish to prepare for teaching the sciences in the high schools of the state.

The fees for work in this department are the same as for other college work, i. e., six dollars tuition and two dollars for each laboratory period per semester.

The following subjects are all required for both the degree of Pharmacy Graduate and the degree of Bachelor of Science in Pharmacy:

1. **Pharmacy Latin.**—Three credits; first semester, first year, The subject is taught with special reference to its application in pharmacy. The vocabulary employed is strictly pharmaceutical. Text: Crothers and Biers, Elements of Pharmacy Latin.

2. **Materia Medica.**—Five credits; first semester, second year. Medical properties, doses and poisonous effects of the various medicines, together with the antidotes which the pharmicist may be required to administer in an emergency, will receive full and careful treatment. Text: Potter's Materia Medica, Pharmacy and Therapeutics.

3. **Materia Medica.**—Five credits; second semester, second year. Continuation of Pharmacy 2.

4. **Pharmacy.**—Five credits; first semester, second year; prerequisite, Chemistry 2. Forms and uses of pharmaceutical apparatus, weighing by apothecary and metric systems, specific gravity of solids and liquids, heating apparatus, determination of boiling and melting points, distillation, comminution, solution, precipitation, filtration, crystallization, percolation, and study of official medicines, waters, syrups, mucilages, mixtures, spirits, elixirs, liniments, infusions, tinctures, fluid extracts, oleoresins and extracts. Text: Remington's Practice of Pharmacy.

5. **Pharmacy Laboratory.**—Three credits; first semester, second year. Preparation of waters, syrups, mucilages, etc., mentioned in Pharmacy 4, must be taken up in connection with it. Text: Remington's Practice of Pharmacy.

6. **Pharmaceutical Problems.**—Two credits; first semester, first year. Relationship of metric, apothecary, and imperial systems of weights and measures, specific gravity, specific volume percentage problems, concentration and dilution, alligation and chemical problems. Text: Olberg's Pharmaceutical and Chemical Problems.

7. **Pharmacy.**—Five credits; second semester, second year; prerequisite, Pharmacy 4 and 5. Official inorganic salts and their compounds, solutions, emulsions, powders, pills, ointments, and plasters; reading prescriptions. Texts: Remington's Practice of Pharmacy, Ruddiman's Incompatibilities in Prescriptions.

8. **Pharmacy Laboratory.**—Four credits; second semester, second year; prerequisite, Pharmacy 5 and 6. Compounding of prescriptions, making of inorganic salts, solutions, emulsions, powders, pills; reading and compounding prescriptions. Must be taken same semester as Pharmacy 7. Texts: Remington's Practice of Pharmacy, Ruddiman's Incompatibilities in Prescriptions, Olberg's 1,500 Prescriptions, National Formulary.

9. **Volumetric Analysis and Drug Assaying.**—Four credits; second semester, second year; prerequisite, Chemistry 3. There are at present in the U. S. Pharmacopoeia 315 volumetric, gravi-metric and other assays. In this subject we endeavor to give enough of this work to enable a student to make any of these assays in an intelligent and accurate manner. The students are required to make their own volumetric and indicator solutions. A short course in urine analysis is given in connection with this work. Texts: U. S. Pharmacopoeia, Schimpf's Volumetric Analysis; lecture notes by the teacher.

10. **Pharmacognosy.**—Four credits; second semester; prerequisite, Botany 2. The habitat, classification, characteristics, histology, identification, and adulteration of the official crude drugs. Special attention is also given to the physiological action of the active principles in each drug. And a limited study of the growth of some of the more common medicinal plants is carried on by the student.

MUSIC

Professor Hedge; Assistant Professor Peterson; Assistant Professor Christensen; Miss Clisby; Miss Trimble; Miss Burrows; Miss Smith.

The purpose of this department is to give the very best musical training possible at a minimum cost, without sacrificing the high standards of the institution.

It is generally recognized that few branches of study require a greater and broader training of the mind than does the study of music, and not only cultivation of the mind, but of the emotions as well. The emotional is a phase too often neglected in education, although it has so important a part in life. In music one must learn to control—to keep in the background—one's own emotions, in order to give true expression to the thoughts of the master minds which have so wonderfully woven the beautiful harmonies.

A knowledge of music also serves to give proper balance to an education, the aesthetic side of which is too often neglected.

Our course is arranged with a view to supplying the needs more especially of those who wish to broaden themselves and to make it a part of their general education.

ADVANTAGES

Opportunities are given for the hearing of the best music during the school year, which is a most important adjunct to proper musical education. These occasions include our high-grade faculty concerts, and an Artists' course which consists of recitals by some of the best musicians of the country. It is also planned to bring one of the Symphony Orchestras here for a concert each season.

During the past school year the following concerts, oratorios and recitals have been given under the supervision of the Department of Music: October 15th, Sunday afternoon concert, by Faculty Concert Party; November 19th; Historical Piano Recital, by Henry Loudenback, of Atchison, Kan.; December 5th, Choral Union and Symphony Orchestra, went in

special train to Tyler, Minn., to give Handel's "Messiah" afternoon and evening concerts; December 8th, Choral Union gave their fourth annual production of Handel's "Messiah," in Big Four Concerts; January 14, 1917, Carl Christensen String Quartet gave Sunday afternoon concert; January 26th, annual Military Band Concert in Big Four Concerts; February 18th, S. D. S. C. Harmony Male Quartet gave Sunday afternoon Concert; February 23rd, Symphony Orchestra Concert annual concert in Big Four Concert; March 16th, Choral Union gave Mendelssohn's "Elijah" in Big Four Concerts; April 15th, S. D. S. C. Ladies' Quartet gave Sunday afternoon concert; April 3rd, Graduate Piano Recital, by Miss Maurine Moore, assisted by Miss Leonora Pier, soprano, April 23rd, Graduate Piano Recital, by Miss Margaret Norman, assisted by Miss Lela Linn, contralto; April 29th, Violin Recital, by Frederick A. Cooke, of Minneapolis; May 20th, Sunday afternoon concert; June 1st, Annual Faculty Recital. Six music students convocations and students recitals were given during the school year exclusive of the graduate recitals.

The soloists heard in concert, oratorio and recitals during the past school year were: Bohumir Kryl, World Famous Cornetist; Josephine Kryl, violinist; Marie Kryl, pianist; Sibyl Sammis-MacDermid, James G. MacDermid, soprano and pianist, of Chicago; Lucille Stevenson, soprano, of Chicago; Harry Phillips, baritone, of Minneapolis; Dwight E. Cook, tenor; Henry Loudenback, pianist, of Atchison, Kan.; Frederick A. Cooke, violinist, of Minneapolis; Ida Elizabeth Trimble, contralto, Evelyn Rude, soprano; Leonora Pier, soprano; Gerhart Oyloe, basso; Marion G. Carlisle, contralto; Carl Christensen, violinist; Sylvia C. Clisby, pianist and cellist; W. A. Peterson, pianist; Alice Iona Burrows, pianist; Walter Whitmus, tenor; Henrietta Smith, violinist; Cecil Brown, violinist; H. H. Pickett, cornetist; Garnett Hedge, tenor.

The Faculty Concert Party gave three concerts during the season at Strandburg, S. D., Miller, S. D., Watertown before the State Educational meeting.

The State College Military Band also made a most sue-

cessful concert tour to the Black Hills and received a most enthusiastic reception at each of the nine points visited.

In addition to these advantages, Prof. Hedge will train and direct, free to all College students and to outside singers, a choral union, a chapel choir of twenty-four picked voices, a men's glee club, and a women's glee club.

One credit a year will be given to Juniors and Seniors for choral singing in either Choral Union or Chapel Choir, provided the work is carried the full school year.

Professor Christensen will conduct the College bands and orchestra, both of which have already made an excellent reputation throughout this part of the country.

The Men's Glee Club and Orchestra have made tours during the last three years through different parts of the state and have met with great enthusiasm and success.

Recitals are also required of all students at various times during the year and attendance is obligatory upon every student in this department.

CONDITIONS FOR ENTRANCE

The candidate for admission to the College must be at least fourteen years of age and of good moral character, and must have completed the work of the public schools as far as the ninth grade.

Students of music who have not completed the requirements for entrance to the freshman class will be required to take at the same time two text book subjects of the preparatory course.

STUDENTS' CONVOCATION

The Music Students' Convocation meets once each month at which programs are given by students or faculty. As this is part of the school work each student of music is required to be present.

COURSES

Three courses are available for students of this department:

1. Preparatory.
2. Academic.
3. Collegiate.

The Preparatory Course is open to all beginners and consists of rudiments, tone production, formation of correct habits of thought and execution, etc.

The Academic Course is for those who do not desire to complete the full course, but only to become fairly proficient as performers and to secure a general knowledge of the fundamental principles of the art. At the completion of this course, the student is awarded a certificate of proficiency or merit.

The Collegiate Course leads to graduation and consists of four years' work. To complete this course, the student must have secured a thorough knowledge of harmony, theory and history as outlined in these respective courses. Upon its completion, the student will be given a diploma in music, provided the entrance requirements to the freshman class have been completed.

For convenience, music students who have completed the entrance requirements to the Freshman class and one year of the Collegiate course in music will be ranked as though they were carrying full college work, provided that in addition to the full Collegiate course in music they carry other college work amounting to twelve credits. In such work of the department as may be sufficiently advanced, college credit will be given and a reasonable amount counted towards the completion of the requirements for the Bachelor's degree.

VOICE

Prof. Hedge; Miss Trimble.

The method used is the correct placing of the voice so that the pupil can produce with equal ease and firmness and with an even quality, all tones from the lowest to the highest. The mechanism of the voice is explained as far as necessary.

In correct breathing, correct position in singing and chest development lies the foundation of voice building.

The course of instruction is based on the Italian School of training the voice. The fundamental principle of the old Italian teachers was to poise the voice. From this comes the even scale, the range, the power to sustain, and the agility, all of which combined formed the "bel canto" or beautiful singing.

Special attention is paid to the needs of each individual, with exercises and studies carefully selected according to the requirements of each voice.

Study will be made of the interpretation of songs and ballads chosen from the best of the German, Italian, French, English and American schools, with strict attention to phrasing, enunciation and rhythm.

Voice Outline

First Year.	Second Year.	Third Year.
Voice Culture.	Voice Culture.	Vocal Culture.
Piano.	Piano.	Song Literature.
Sight Reading.	Harmony.	Theory,
Musical History.	Languages.	Church Music.
Languages.	Ear Training.	Hymnology and
Songs.	Songs.	Oratorio, Opera Airs.
		Harmony.

Fourth Year.—Graduate programs prepared, the science of building and arranging programs, advanced work given to develop and broaden the musical as well as the educational side.

First Year

The formation of tone; elementary exercises for the development of the voice and art of respiration; Seiber's thirty-six eight measure vocalises; exercises in articulation and art of phrasing; easy and pleasing songs in English.

Second Year

Exercises in scales, precision and flexibility; studies by Lutgen, Concone, Tosti, Vacci; songs from German and English composers.

Third Year

Exercises in scales, precision and flexibility continued; advanced vocalization; songs by Schubert, Schumann, Franz, Brahms, and arias and duets from operas.

Fourth Year

Exercises continued as above with studies in bravoura singing. Exercises and solfeggios used, classified according

to difficulty, are those of Concone, Marchesi, Lamberti and Brambilla. Recitatives and arias from the standard oratorios and operas.

For the Diploma in vocal music, the pupil must complete the courses in harmony, theory and history of music, ear training and sight reading, and must also complete the work of the academic course in instrumental music.

PIANO

Mr. Peterson; Miss Clisby; Miss Burrows.

The study of piano is conducted with a view to balancing more perfectly the training of the mind and the cultivation of technical power. Too often stress is placed upon one or the other, more frequently the latter, to an extreme. Technic is but the means to an end; i. e., the correct interpretation of the masters, and should be so considered.

Special attention is directed from the very beginning to the student's habit of thinking. This is done largely through the method of harmonic analysis and memorizing in an orderly and concentrative manner.

The musical side of the student's personality is brought into action through intelligent and artistic interpretation and its development is materially assisted by his having the opportunity to hear good music, artistically rendered as often as possible.

In technical development, special work is given for the acquisition of finger strength and independence, a correct position of the hand and purity of tone. Since it is now generally believed that the purest and sweetest tones are secured from direct finger action, this is much emphasized throughout the course.

These fundamental ideas are associated with the principle, the understanding of which is so necessary to the successful teacher, that efforts should continually be made to render the study of the piano less irksome and as intensely interesting to the student as it can be made.

Piano Outline

First Year.	Second Year.	Third Year.
Piano.	Piano.	Piano.
Harmony.	Harmony.	Harmony.
Musical History.	Violin or Voice.	Violin or Voice.
Musical Literature and Analysis.	Ear Training. Theory.	Ensemble Playing.

Fourth Year.—Graduate programs prepared, the science of building and arranging programs, advanced work given to develop and broaden the musical as well as the educational side.

Preparatory Course

Studies from Czerny, Gurlitt, Macdougall, Bach and other composers; sonatinas from Clementi, Kuhlau, Gurlitt, etc.; the easier sonatas of Haydn and Mozart, and the less difficult compositions of Schumann, Grieg, MacDowell, Schubert, Chopin and others.

Collegiate Course

First Year.—Etudes of Heller, Czerny, Foote; selections from the Bach suites and sonatas of Beethoven, Haydn and Mozart; compositions of Mendelssohn, Schubert, Chopin, Schumann, Grieg, MacDowell, etc.

Second Year.—Studies from Bach, (inventions and suites), Heller, Czerny, and others; sonatas of Mozart and Beethoven; solos selected from Weber, Chopin, Mendelssohn, Schumann, Grieg, MacDowell, Liszt and others; also some of the easier concertos of Mendelssohn, Reinecke, Weber, Mozart, etc.

(For examination last year, students played a movement from Mendelssohn's Concerto in G Minor, a Bach Fugue and an expression piece selected from some of the composers of the Romantic School.)

Third Year.—Studies from Bach (Well Tempered Clavichord), Chopin, Liszt, Foote; sonatas of Schubert, Beethoven, Grieg, Weber, Chopin; solo work of Mendelssohn, Weber, Schumann, Liszt, Rubinstein, Grieg, MacDowell and the modern French, Russian and American composers; concertos of Beethoven, Rubinstein, Chopin, Schumann, Saint Saens, etc.

Fourth Year.—Graduate programs prepared, the science of building and arranging programs, advanced work given to develop and broaden the musical as well as the educational side.

VIOLIN

Mr. Christensen; Miss Smith

Position, tone production on open strings, most important rudiments of musical theory in general, Hohmann's Violin School, Book 1; duets by Gebauer and Mazas; miscellaneous solos with piano accompaniment.

Collegiate Course

First Year.—Two octave scales in all major and minor keys; Sevcik, Opus 1, Book 1, Violin Technique; study of the positions, Hohmann, Book IV; studies by Wohlfart, Opus 45, Books I and II; miscellaneous solos with piano accompaniment.

Second Year.—Three octave scales in all major and minor keys; Sevcik, Opus 7, Violin Technic, Books I and II; Sevcik's "Four Thousand Bowings;" Kayser's Etudes, Opus 20, Books I and II; Mazas, Opus 36, Book 1, Violin Studies; solos with piano accompaniment by DeBeriot, Wieniawski, Mendelssohn, etc.

Third Year.—Sevcik, Opus 7, Books I and II; Sevcik's "Four Thousand Bowings;" Schralieck's Technical Studies; Mazas Studies Opus 36, Book II; etudes by Dont and Kreutzer; solos by Wieniawski, Vieuxtemps, Mendelssohn, Bruch, Godard, etc.; concertos by Viotti, De Beriot, etc.

Fourth Year.—Graduate programs prepared, the science of building and arranging programs, advanced work given to develop and broaden the musical as well as the educational side.

Violin or Violoncello Outline

First Year.	Second Year.	Third Year.
Violin or Cello.	Violin or Cello.	Violin or Cello.
Harmony.	Harmony.	Harmony.
Piano.	Piano.	Ensemble Playing.
Musical History.	Musical Literature and Analysis.	
	Theory.	
	Ear Training.	

PIPE ORGAN

At the present the College has no pipe organ but it is expected that a very fine organ will be installed in the College Auditorium the coming school year, and anyone desiring to take up the study of this department will have the opportunity of taking the full organ course here at State College.

HARMONY

Mr. Peterson.

In the study of harmony, the older ideas of harmonizing a given melody or figured bass are discarded as far as possible. The student is taught from the beginning to write his own melodies for harmonization, thus, while stimulating his originality and inventive ability, taking from the study of harmony that mechanical and superfluous aspect so often too apparent to the pupil, and firmly establishing its proper place in the study of music.

In the first year (collegiate) the student receives ear training and the rudiments of harmony, including intervals, scales and chord formation, chords and their tonal relations, melody writing and simple harmonization.

In the second year, melody writing is continued, harmonization a little further developed, new chords introduced, etc.

The third year leads to altered chords and modulation, elaboration of melody, imitation, counterpoint, canon, fugues and composition in the easier forms.

This study is generally conducted in classes of four or five, but those who desire quicker advance may secure private lessons at special rates, according to the statement upon another page.

HISTORY

The classes in the study of musical history are conducted by Miss Clisby. This clearly follows the development of music and musical instruments from the earliest to the present time. This is a subject upon which every musical student should be well grounded, and some knowledge of it is essential in the general educational equipment of everyone who is at all musically inclined. An examination upon this subject must be passed by all students before receiving certificates or diplomas.

THEORY

The study of theory is conducted by Mr. Peterson. This study includes the principles of acoustics and formation of sound, together with a study of analysis of musical forms; simple songs, forms, arias, ballads, and other vocal forms;

the more simple forms of dance music, leading to the higher forms of the sonatina and sonata, canon, fugue, etc.

This study is also required of all students receiving certificates or diplomas.

EAR TRAINING

A special class in ear training and sight reading is to be included in the course for the coming year, to be conducted by a capable and experienced teacher. This study will be required of all music students.

EXPENSES OF STUDENTS

The tuition for regular work throughout the year is listed in the table of fees below and depends upon the instructor, subjects studied, etc.

The terms and prices to the student of the five months' course in Agriculture will be the same as that for the regular semester, as given below.

FEES

The following fees will be charged a semester for instruction:

Prof. Hedge.

Voice—
Two half hour lessons per week, major work $32.00
One half hour lesson per week, minor work 18.00

Mr. Christensen.

Violin, Viola, Cello and Band Instruments—
Two half hour lessons per week, major work $28.00
One half hour lesson per week, minor work 17.00

Mr. Peterson.

Piano—
Two half hour lessons per week, major work $28.00
One half hour lesson per week, minor work 17.00

Miss Clisby.

Piano—
Two half hour lessons per week, major work $26.00
One half hour lesson per week, minor work 15.00

Misses Trimble, Burrows, and Smith.

Voice, Piano, Pipe Organ, and Violin—
Two half hour lessons per week, major work $26.00
One half hour lesson per week, minor work 15.00

Harmony, history, theory, ear training, sight reading, etc., in classes, free to all students in voice, piano or violin.

Private lessons in harmony may be obtained for the additional fee of $10.00 a semester. Students desiring private lessons in harmony and studying in more than one department, for example, both voice and piano departments, will be given a discount of $5.00 a semester to cover the free theoretical work to which they are entitled in each of these departments.

Practice pianos may be used at the following rates a semester:
One hour a day, $4.00.
Two hours a day, $7.00.
Three hours a day, $9.50.
Four hours a day, $12.00.

ART

Professor Caldwell; Assistant Professor Goddard.

The aim in arranging the subjects in this department has been to offer such work as will correlate with other college courses in becoming a means to a general education.

The object of the work is to cultivate an appreciation of beauty and to develop technical skill.

The department is equipped with a good collection of casts and photographs and with such tools as are necessary for class work.

Two courses of study are offered, the preliminary work in each being the same. One course includes the study of form and color, and the other principles of design and their application in various crafts. A diploma is given students who satisfactorily complete either course. The time necessary to secure a diploma depends on the ability of the student, three years being an average length of time, although the work may be extended over a longer period and carried with a regular college course. The course in academic drawing and painting includes drawing from cast and still life, painting and art history, (courses 6, 7, 8, 9, 10, 11, 12, 13). The course in applied design includes a year of drawing, two years of design and handicraft with a year of art history, (courses 4, 5, 6, 7, 8, 9).

Any advanced student wishing to study the technique of

pen and ink will be given individual instruction in that subject.

For Art 1 and 2 see the preparatory department.

3. **Theory of Design.**—One credit; second semester. This subject treats of the principles of design and their practical application in the home.

4-5. **Applied Design.**—Two credits each semester. Four periods a week for the working out of designs in the various crafts of basketry, leather tooling, metalry, jewelry, stenciling and bobbin lace. Students wishing a diploma are required to continue the study of design for a second year and study the principles of the crafts they have not included in their first year's study of applied design.

6. **Art History.**—Two credits; first semester. This course aims to acquaint the student with the styles of historic architecture and with prominent buildings illustrative of each style.

7. **Art History.**—Two credits; second semester. A study of great schools of painting. Reference books in the general library and a collection of photographs in the department furnish material for this course.

8. **Charcoal Drawing.**—Two credits; first semester; elective to students pursuing special work in art. Drawing from simple casts in outline and in light and shade.

10. **Charcoal Drawing.**—Two credits; first or second semester; elective to students pursuing special work in art. Drawing of heads and figures in full light and shade from casts, sketching from pose; prerequisite, Art 8.

11. **Study of Values.**—Two credits; first or second semester; elective to students pursuing special work in art. Value studies in charcoal from still life as preparatory work for painting; prerequisite, Art 1-2.

12-13. **Painting.**—Two credits each semester; elective to students pursuing special work in art; prerequisite, Art 8. Study of color and technic of painting in oil, pastel, and water color from still life and flowers.

14-15. **Drawing.**—Two credits each semester. This course will include object and nature drawing with pencil and colored crayon, for the study of proportion, perspective, light and shade, and pencil technic, thus enabling the student to express the appearance of objects.

DEPARTMENT OF MILITARY TACTICS AND SCIENCE

Captain Matson, Commandant; Sergeant Loane, Assistant.

The work of this department is conducted in accordance with War Department Orders promulgated pursuant to Act of Congress, approved June 3, 1916.

Under this Act of Congress military instruction at schools, colleges and universities has taken on an added significance. This work has been made an integral part of the National military policy.

All students taking military training at the various educational institutions throughout the United States are organized into a RESERVE OFFICERS TRAINING CORPS (R. O. T. C.), which is composed of Senior and Junior Units. These units are established by the President of the United States and each consists of not less than 100 physically fit male students, not less than 16 years of age.

South Dakota State College, having fulfilled all requirements of the law, has had established thereat one Senior Unit, (Infantry), of the R. O. T. C.

The primary object of establishing units of the R. O. T. C. is to qualify, by systematic and standard methods of training, students at civil educational institutions for RESERVE OFFICERS. The system of instruction prescribed presents to students a standardized measure of that military training which is necessary in order to prepare them to perform intelligently the duties of commissioned officer in the military forces of the United States, and it enables them to be thus trained with the least practical interference with their civil careers.

All men students below the junior year are required to take military training—an equivalent of three hours per week during the academic year, for which one credit each semester is given. This work is a prerequisite for graduation.

After July 1, 1917, the Federal Government will be prepared to issue to the College, for the use of each member of the R. O. T. C. the following articles of uniform: 1—breeches, woolen, olive drab, pairs; 1—cap, olive drab; 1—coat, woolen,

olive drab; 1—leggings, canvas, pairs; 1—cap and collar ornament, set; 1—shoes, russet, pairs.

For each member of the R. O. T. C. who agrees in writing to participate in such camps of instruction as the Secretary of War shall prescribe, there will be issued the following additional articles of uniform: 1—hat, service; 1—cord, hat; 2—breeches, cotton, olive drab, pairs; 2—shirts, flannel, olive drab.

There will also be issued the latest model arms, equipments, animals and means of transportation, in so far as the supply and appropriations permit.

It is the desire of the War Department to have as many students as possible continue the military instruction throughout the entire four years of their academic course. Hence to all juniors and seniors, who desire to continue the work, who will agree in writing to continue the work until graduation, to take five hours a week, and to participate in two camps of instruction, the Federal government will pay commutation of subsistence at the rate of about 30 cents per day or approximately $9.00 per month to each such student during his junior and senior years.

Having completed the four years' course in military training and participated in at least two camps of instruction, such students are then eligible to be commissioned in the Officers Reserve Corps, and, if they so desire, for appointment as temporary Second Lieutenants in the Regular Army for a period of six months, with pay of $100.00 per month and other allowances of that grade.

The OFFICERS RESERVE CORPS is composed of citizens of the United States who have had military training and who, upon examination, shall be found physically, mentally, and morally qualified. The President alone is authorized to commission such men as RESERVE OFFICERS in all grades up to and including that of Major.

The purpose of this OFFICERS RESERVE CORPS is to secure a reserve of officers available for service as temporary o cers in the Regular Army, as officers of the Quartermaster Corps and other staff corps and departments, as officers of recruiting rendezvous and depots, and as officers of volunteers.

Reserve officers must agree to serve as such for ten years. They are not subject to call for service in time of peace except, that, for purposes of instruction, they may be called upon for service with troops or at field exercises for periods not to exceed 15 days in any one calendar year, and while so serving they shall receive the pay and allowances of an officer of the same grade in the Regular Army. Reserve officers are subject to call for duty in times of threatened or actual hostilities, and while so serving they shall receive the pay and allowances of an officer of the same grade in the Regular Army.

Military training during one's college course should be looked forward to with pleasure and not with dread. It can be made to produce individual benefit of lasting value. Any young man who has instilled in him the principles of team-work, subordination and discipline, is far better equipped to meet the problems of every day life than he is without them. Everyone who is fit to be a citizen of a free country ought to be willing to serve the country when needed and hence every young man should welcome an opportunity to learn something of military training during his college course.

The following courses of instruction in Military Science and Tactics have been prescribed in orders from the War Department for Infantry Units of the Senior Division:

Freshman Year.

1. **Military Art.**—Three hours a week (counting 14 units.)

(a) **Practical.**—Weight 10. Physical drill (Manual of Physical Training—Koehler); infantry drill (U. S. Infantry Drill Regulations), to include the School of the Soldier, Squad and Company, close and extended order. Preliminary instruction sighting position and aiming drills, gallery practice, nomenclature and care of rifle and equipment.

(b) **Theoretical.**—Weight 4. Theory of target practice, individual and collective (use of landscape targets made up by U. S. Military Disciplinary Barracks, Fort Leavenworth, Kans.); military organization (Tables of Organization); map reading; service of security; personal hygiene.

2. **Military Art.**—Three hours a week (counting 14 units.)

(a) **Practical.**—Weight 10. Physical drill (Manual of Physical Training—Koehler); infantry drill (U. S. Infantry Drill Regulations), to include School of Battalion, special attention devoted to fire direction and control; ceremonies; manuals (Part V, Infantry

Drill Regulations); bayonet combat; intrenchments (584-595 Infantry Drill Regulations); first-aid instruction; range and gallery practice.

(b) **Theoretical.**—Weight 4. Lectures, general military policy as shown by military history of the United States and military obligations of citizenship; service of information; combat (to be illustrated by small tactical exercises); United States Infantry Drill Regulations to include School of the Company; camp sanitation for small commands.

Sophomore Year.

3. **Military Art.**—Three hours a week (counting 14 units.)

(a) **Practical.**—Weight 10. The same as course 2 (a). Combat firing, if practicable, but collective firing should be attempted indoor ranges by devices now in vogue at United States Disciplinary Barracks.

(b) **Theoretical.**—Weight 4. United States Infantry Drill Regulations, to include School of Battalion and Combat (350-362); Small Arms Firing Regulations; lectures as in (b) course 2; map reading; camp sanitation and camping expedients.

4. **Military Art.**—Three hours a week (counting 14 units.)

(a) **Practical.**—Weight 10. The same as course 2 (a), signaling; semaphore and flag; first-aid; work with sand table by constructing to scale intrenchments, field works, obstacles, bridges, etc. Comparison of ground forms (constructed to scale) with terrain as represented on map; range practice.

(b) **Theoretical.**—Weight 4. Lectures, military history (recent); service of information and security (illustrated by small tactical problems in patroling, advance guards, rear guards, flank guards, trench and mine warfare, orders, messages, and camp expedients); marches and camps (Field Service Regulations and Infantry drill regulations.)

Junior Year.

5. **Military Art.**—Five hours a week (counting 24 units.)

(a) **Practical.**—Weight 13. Duties consistent with rank as cadet officers or non-commissioned officers in connection with the practical work and exercises laid down for the unit or units. Military sketching.

(b) **Thearetical.**—Weight 11. Minor tactics; field orders (studies in minor tactics, United States School of the Line); map maneuvers. Weight 8. Company administration, general principles (papers and returns.) Weight 1. Military history. Weight 2.

6. **Military Art.**—Five hours a week (counting 24 units.)

(a) **Practical.**—Weight 13. Same as (a) course 5. Military sketching.

(b) **Theoretical.**—Weight 11. Minor tactics (continued); map maneuvers. Weight 8. Elements of International Law. Weight 2.

Property accountability; method of obtaining supplies and equipment (Army Regulations.) Weight 1.

Senior Year.

7. **Military Art.**—Five hours a week (counting 24 units.)

(a) **Practical.**—Weight 13. Duties consistent with the rank as cadet officers or non-commissioned officers in connection with the practical work and exercises scheduled for the unit or units. Military sketching.

(b) **Theoretical.**—Weight 11. Tactical problems, small forces, all arms combined; map maneuvers; court martial proceedings (Manual for Courts Martial) International relations of America from discovery to present day; gradual growth of principles of international law embodied in American diplomacy, legislation and treaties. Lectures: Psychology of war and kindred subjects. General principles of strategy only, planned to show the intimate relationship between the statesman and the soldier (not to exceed five lectures.)

8. **Military Art.**—Five hours a week (counting 24 units.)

(a) **Practical.**—Weight 13. Same as course 7 (a).

(b) **Theoretical**—Weight 11. Tactical problems (continued); map maneuvers. Rifle in war. Lectures on military history and policy.

It is presumed that each member of the Reserve Officers Training Corps during his academic course has taken one course or equivalent credit in either French, or German, or Spanish.

DEPARTMENT OF COMMERCE

Professor Schlatter.

The department of commerce offers two courses of study:

(1). The Secretarial course for students who have completed a high school course of two or more years. The work of the course may be counted towards the completion of the entrance requirements to the freshman year of the college, under certain restrictions imposed by the committee on entrance requirements—and also depending upon the additional work that has been done by the student. However, it frequently happens that such students have no intention of pursuing a regular collegiate course of study, but are obliged by force of circumstances to take a one-year's business course preparatory to office work. These students welcome the opportunity of securing a commercial education in a college atmosphere.

(2). The regular commercial course combines preparatory subjects with business branches and covers a period of four years. This course is valuable to the student who desires to obtain a broad general knowledge with his commercial training. The student also gets regular credit for the work toward admission to the freshman year of college, in case he wishes to continue his education. Many students, in fact, take the business subjects in order to learn some method of earning their future college expenses.

All stenographic courses are so arranged that students are given considerable actual office practice during the second semester just before completing the course. The idea is to train the student for immediate service in office work, and to minimize the customary bungling of the beginner.

The demand for our graduates far exceeds the supply. Hardly a week passes that we are not asked to recommend some young man or woman for office work.

Brookings is now a regular point for holding of Civil Service examinations. Students who desire to take the examinations are encouraged to do so and are given all the preparation possible.

Those who have not completed the equivalent of at least three years of a high school course should follow the course in commercial science as outlined in the schedule of the preparatory department. Shorthand students are required to have had a preliminary English training of about two years.

Under certain restrictions, collegiate students are permitted to take electives in Business Law, Theory of Money and Banking, Economic Geography, Shorthand, Accounting, and Business Principles.

THE SECRETARIAL COURSE

First Semester

	Credits
Business Law, Commerce 9	3
English, English 5, 7, or 9	3 or 4
Shorthand, Commerce 5	5
Typewriting, Commerce 6	5
Accounting, Commerce 11	2

Second Semester

	Credits
English, English 6, 8, or 10	3
Shorthand, Commerce 7	5
Typewriting, Commerce 8	3
Secretary Practice, Commerce 14	5
Money & Banking, Commerce 10	3
or	
Business Principles, Commerce 12	2
or	
Economic Geography, Commerce 13	3

THE COMMERCIAL COURSE

The following subjects are offered in the regular-four-years course in commercial science. For complete schedule see outline of preparatory course.

1. **Business Methods and Penmanship.**—Three credits; first semester. A practical course designed to teach the student to write creditable business forms, and to give him an elementary knowledge of practical business methods. Particular attention is given to penmanship.

2. **Commercial Geography.**—Three credits; second semester; Study of industry and commerce, local, national, and international. This course will be illustrated by the use of a commercial museum now being collected. The student will be required to learn the use of government reports and other sources of information in collecting data.

3. **Bookkeeping.**—Three credits; first semester. Single and double entry studied as in actual business; the aim being to acquaint the student with the fundamental principles of bookkeeping. Students who are deficient in penmanship will be required to take course 1.

4. **Bookkeeping.**—Three credits; second semester. Advanced bookkeeping, affording practice with the more complex books and forms used in modern offices. By the use of separate price lists, each student will be obliged to do independent study and thinking. In this course the student becomes familiar with the uses of various kinds of commercial paper and office practice.

5. **Shorthand.**—Five credits; first semester. In this course the student masters the theory of shorthand; dictation of simple business letters to develop facility in handling writing material; drills on principles, characters and word-signs. Gregg shorthand is taught. Nothing but the very best work is accepted, for it is time wasted to prepare second and third rate stenographers for office work.

6-8. **Typewriting.**—Two credits each semester. Graded exercises to learn machine by touch method; care of machine; correspondence and legal forms; manifolding and mimeographing; billing and tabulating.

7. **Shorthand.**—Five credits; second semester. Dictation of business letters and general matter to develop speed; legal forms; civil service matter. The student is not allowed to develop speed carelessly, at the expense of legibility. With this course, the student makes a study of commercial correspondence and the most approved forms in letter composition. All dictated matter is transcribed on the typewriter.

9. **Business Law.**—Three credits; first semester; three recitations a week. Designed to acquaint the student with the fundamental principles of business law, supplemented with a study of actual cases illustrative of these principles. A topical analysis of contracts; negotiable paper; agency; sale of chattels; bailment.

10. **Money and Banking.**—Three credits; second semester. Alternate with commerce 13. A theoretical and practical study of the history of money; nature and uses of money; classification of banks; bank circulation; deposits and loans; collection; reserves; legal regulations; clearing houses; loan and trust companies.

11. **General Accounting.**—Two credits; first semester. It is the purpose of this course to acquaint the student with the different forms of industrial organizations, and the nature and analysis of their business transactions. The theory of the exchange of values and that of debits and credits are studied. Attention is given to the correct classification of business interests into their proper accounts with special reference to their relations in the different kinds of statements.

12. **Business Principles.**—Two credits; second semester. Business principles, organization and methods are discussed in untechnical language, in such a manner as to make the work profitable to the general student as well as to the student of business. Topics discussed are: economic basis of business; types of business organization; interior organization; principles of management; the entrepreneur; and efficient business methods.

13. **Economic Geography.**—Three credits; second semester; alternates with Money and Banking; will be given in 1916-17. A practical study of the geography of production. The following topics are studied as thoroly as possible in the limited time given to this subject: Regions of production and consumption of grains; fruits; sugar; tea; coffee; and cocoa; cotton; wool; beef and dairy products; swine; fisheries; forest; coal; petroleum; iron and steel. Also some time is given to the study of manufacturing industries, origin and basis of trade, ocean and land trade routes, commercial centers, and types of commercial nations. This subject is especially

desirable to those students who expect some time to be able to judge trade and market conditions intelligently.

14. **Secretary Practice.**—Five Credits; second semester. Afternoon practice with college offices or business firms in town. Also a great deal of practice in taking letters, etc., and transcribing them on the typewriter is given in the class room. The practice will be of great value in giving preliminary experience, and will remove the fear of entering the first regular office work upon graduation.

PREPARATORY DEPARTMENT

Professor Forsee.

For the benefit of students who do not have high school advantages a preparatory department is maintained. This course, the work of which extends over four years, contains certain required subjects that are considered necessary to a liberal education. The remaining work may be chosen from a large list of elective subjects. The student who pursues the course may thus secure a good preparation for entering upon more advanced work or a training for practical life.

The course conforms to the admission requirements as far as the conditions in the College permit. Students will be admitted to the college courses upon the completion of the required subjects and an additional amount of work chosen from the elective subjects to make fifteen units, a unit being five hours a week throughout the year. This requires about three hours of elective work a week in addition to the required subjects during the four years. In addition to the requirements outlined below, all students will be required to attend and take part in literary society work, for which they will receive reasonable credit.

PREPARATORY COURSE

First Year

First Semester—

	Credits
English Composition, English 1	5
Arithmetic (Including Metric System), Mathematics 1.	5
Physiography	5

	Credits
Business Correspondence and Penmanship, Commerce 1 ..	
or	
Freehand Drawing, Art 1	3
Military Tactics	1
Elective	3
Second Semester—	
English Composition, English 2	5
Beg. Algebra, Mathematics 2	5
Civics, History 1	4
Commerce and Industry, Commerce 2	
or	
Freehand Drawing, Art 2	3
Military Tactics	1
Elective	3

For list of preparatory electives, see the following pages.

Second Year

First Semester—	
English Composition and Rhetoric, English 3	5
Algebra, Mathematics 3	5
Elementary Biology, Entomology 1	5
Military Tactics	1
Elective	3
Second Semester—	
English Composition and Rhetoric, English 4	5
Algebra, Mathematics 4	5
Elementary Biology, Entomology 2	5
Military Tactics	1
Elective	3

For list of preparatory electives, see the following pages.

Third Year

First Semester—	
American Literature, English 5	4
Plane Geometry, Mathematics 5	4
German, German Pr. 1	5
*Greek History, History 3	3
Military Tactics	1
Elective	3
Second Semester—	
American Literature, English 6	4
Plane Geometry, Mathematics 6	4
German, German Pr. 2	5
Roman History, History 4	3
Military Tactics	1
Elective	3

For list of preparatory electives, see the following pages.

Credits

Fourth Year

First Semester—

English Literature, English 7 3
Elementary Physics, Physics 1 5
German, German Pr. 3 5
American History, History 5 3
Military Tactics 1
Elective 3

Second Semester—

English Literature, English 8 3
Elementary Physics, Physics 2 5
German, German Pr. 4 5
American History, History 6 3
Military Tactics 1
Elective 1

For list of preparatory electives, see the following pages.

*Students taking Shorthand will be allowed to substitute typewriting for Greek History and Roman History, or for American History.

PREPARATORY ELECTIVES

First and Second Years

First Semester—

Freehand Drawing, Art 1 3
Carpentry, Mechanical Engineering 1 3
Elementary Agriculture, Agriculture 1 3
Cooking, Home Economics 1 3
Bookkeeping, Commerce 4 3
Business Correspondence, Commerce 1 3
Typewriting, Commerce 6 2

Second Semester—

Freehand Drawing, Art 2 3
Forging, Mechanical Engineering 2 3
Elementary Agriculture, Agriculture 2 3
Sewing, Home Economics 2 3
Bookkeeping, Commerce 4 3
Typewriting, Commerce 8 2
Commerce and Industry, Commerce 2 3

Third and Fourth Years

First Semester—

Freehand Drawing, Art 1 3
Cooking, Home Economics 2 3
Carpentry, Mechanical Engineering 1 3
*Shorthand, Commerce 5 5
Elementary Agriculture, Agriculture 1 3

	Credits
Typewriting, Commerce 6	2
Elementary Physiology, Zoology 1	5
Mechanical Drawing, Mechanical Engineering 5	3
Business Law, Commerce 9	3
Bookkeeping, Commerce 3	3
Solid Geometry, Mathematics 7	3

Second Semester—

Freehand Drawing, Art 2	3
Sewing, Home Economics 1	3
Bookkeeping, Commerce 4	3
Forging, Mechanical Engineering 2	3
Mechanical Drawing, Mechanical Engineering 5	3
Typewriting, Commerce 8	2
*Shorthand, Commerce 7	5
Elementary Agriculture, Agriculture 2	3
Elementary Physiology, Zoology 2	3
Money and Banking, Commerce 10	3

*Students taking Shorthand will be allowed to substitute typewriting for Greek History and Roman History, or for American History.

SCHOOL OF AGRICULTURE

Professor Stivers.

The School of Agriculture has for its specific purpose the training of young people for the life and work of the farm and home, for the social life of the rural community and for American citizenship.

The farmers' boys and girls are often needed on the farm and in the homes to help the parents during the busy season of the year. They can usually be spared from such work during the winter season, and may well spend this time in study which will prepare them for practical, profitable farming and successful home management.

While the subjects of study consist primarily of those that relate to farming and household economy, they include also such subjects as are usually given in a regular high school course. For example, English, mathematics, history, civics, chemistry, physics and biology. The technical topics include

studies in soil, plants and crops, domestic animals, feeds and feeding, cooking and sewing, laundering, farm and home management, records and accounts, carpentry and blacksmithing. Text books are used when these aids best answer the purpose. Lectures are given in the subjects which can be most efficiently taught in this way. Demonstrations are given in the class rooms, laboratories, kitchen and sewing-rooms, barns, greenhouses, orchards and fields.

The School of Agriculture welcomes earnest and worthy young men and women from all parts of the state who have passed the eighth grade in the public schools and are willing to work in such a course of mental and manual training as will prepare them for life's labors, on the farms and in the homes of South Dakota.

The tuition is six dollars for the year, with a small fee for each laboratory in which work is taken.

COURSES OF STUDY

Following are the schedules of the courses of study. The academic studies are practically the same for men and women. The courses are differentiated only in such points as are related to their specific spheres in life's work.

THE FOUR-YEARS COURSE FOR YOUNG MEN

Note: The small letters and numerals after the names of subjects indicate the character of the work and the number of times a week, "a" meaning class work, "b" laboratory work.

First Year

Penmanship and Spelling	a 2
English	a 4
Arithmetic or Algebra	a 4
Poultry Culture	a 2
Farm Crops	a 3, b 2
Stock Judging	b 2
Horticulture	b 1
Carpentry	b 3
Lectures on Science	a 2
Military Drill	3

Second Year

English	a 4
Algebra or Advanced Arithmetic	a 4
Farm Accounts	b 1

Plant and Animal Life ..... a 5
Dairying ..... a 1, b 2
Breeds and Breeding ..... a 2, b 1
Horticulture ..... b 1
Blacksmithing ..... b 3
Military Drill 3

Third Year

English ..... a 4
Plane Geometry, Algebra or Advanced Blacksmithing ..... a 4
Civics ..... a 3
Elementary Chemistry ..... a and b 4
Farm Machinery ..... a 2
Entomology ..... a 1, b 1
Stock Feeding ..... a 5
Military Drill 3

Fourth Year

English ..... a 4
History (including lectures on Cooperation) ..... a 4
Geometry or Elementary Farm Management ..... a 4
Elementary Physics ..... a 2, b 2
Physiology ..... a 2
Cement Construction ..... b 2
Veterinary Science ..... a 3
Soils ..... b 3
Military Drill 3

THE FOUR-YEARS COURSE FOR YOUNG WOMEN

First Year

Penmanship and Spelling ..... a 2
English ..... a 4
Arithmetic or Algebra ..... a 4
Craft ..... b 2
Poultry Culture ..... a 2
Cooking I ..... b 3
Sewing I ..... b 3
Dairying ..... b 1
Horticulture ..... b 1
Lectures on Science ..... a 2
Art Needlework (Elective) ..... b 1
Physical Training 2

Second Year

English ..... a 4
Algebra or Arithmetic ..... a 4
Household Accounts ..... b 1

Plant and Animal Life ..... a 3, b 2
Cooking II ..... b 3
Household Management ..... a 1
Art Needlework (Elective) ..... b 1
Freehand Drawing ..... b 1
Physical Training 2
Sewing II ..... b 3

Third Year

English ..... a 4
Plane Geometry or Algebra, or Rural School Domestic Science ... a 4
Civics ..... a 3
Elementary Chemistry ..... a and b 4
Sewing III ..... b 2
The House ..... a 2
Craft ..... b 1
Art Needlework (Elective) ..... b 1
Physical Training 2
Cooking III ..... b 2

Fourth Year

English ..... a 4
History (including lectures or Cooperation) ..... a 4
Geometry ..... a 4
Elementary Physics ..... a 2, b 2
Physiology ..... a 2
Sewing IV ..... b 2
Cooking IV ..... b 2
Home Nursing ..... a 2
Art Needlework (Elective) ..... b 1
Physical Training 2
Millinery ..... b 1

THE SUMMER SCHOOL

Professor Stivers, Director

The work of the Summer Session is planned especially for those who desire training along the industrial lines—Agriculture, Manual Training, Home Economics and allied subjects, either to secure college credits or to prepare for teaching.

The vocational field offers excellent opportunity to teachers. Salaries in this line of work are especially good and the demand for teachers exceeds the supply.

State College with her laboratories, shops, experimental plots and live stock offers many advantages to students who desire to fit themselves to teach vocational subjects.

In addition to members of the regular College staff a number of special instructors and lecturers are employed during the session.

The Summer Session for 1917 will begin June 11th and continue six weeks. The following courses will be offered:

Agriculture.—Animal Husbandry, Breeding Livestock, Stock Judging, Livestock Management, Farm Dairying, Soils and Crops.

Home Economics.—Cookery, Sewing, Dressmaking, Millinery, Serving, Handwork, Basketry, Etc.

Manual Training.—Woodworking, Joinery and Cabinet Construction, Finishing, Mechanical Drawing, and special courses for rural school teachers.

General Sciences.—Elementary Inorganic Chemistry; Elements of Physics; Civics and Rural Social Science, (3 courses); English and American Literature, (4 courses); Nature Study, Evolution and Sanitation, (3 courses).

Education.—Educational Psychology, Principles of Teaching, History of Education, and Recent Social Movements in Education.

Specials.—Primary Methods, Grammar, History, Civics and Geography.

Athletics.—Courses in Coaching Football, Basketball, and Track.

The 1917 Summer Session will begin June 11th. In connection with the Session a Joint Institute of Miner, Moody, Hamlin, Kingsbury, Codington and Brookings counties will be held, beginning June 11th and closing June 22nd. Those wishing detailed information concerning the Summer Session or Joint Institute should write to the President for the Summer School Bulletin.

Short Industrial Courses

THE FARM AND HOME COURSE

December 31 to January 6.

This course, which will be given during the Christmas vacation, will consist of lectures on judging live stock, stock breeding, stock feeding, corn judging, grading and cleaning grain, poultry management and kindred subjects. Write to the College for further information.

THE THREE MONTHS' CREAMERY COURSE.

January 8 to March 15.

This course is especially designed for young men wishing to fit themselves for various positions connected with the creamery industry such as helpers, buttermakers, managers, inspectors, etc.

Prospective students are urged to get at least six months of practical experience in some creamery before attending College, as by this means it is found that much greater benefit is derived from the work at the school.

The more general application of scientific principles to the manufacturing industries as well, as the increasing competition on all sides demands a more thorough training in scientific and business methods than heretofore. This is no less true with regard to the creamery industry, and while the practical work of the school is by no means neglected special pains are taken to teach the underlying principles and the "reason why" for many of our daily operations. The increasing interest in dairying in South Dakota and the consequent multiplication of creameries are creating a demand for men well trained along dairy lines, and applications for such are constantly being received at salaries varying from $50 to $125 per month. Worthy students may count on the co-operation of the dairy department in helping them to secure positions at the close of their college work.

The following work is offered:

Factory buttermaking and creamery management.
Testing milk and its products.
Dairy bacteriology.
Dairy arithmetic and accounting.
Breeding, feeding and management of dairy cattle.
Agronomy.
Veterinary Medicine.
Creamery Mechanics.

The tuition is four dollars for the three months' term with a small additional fee for laboratory expenses.

A certificate of standing will be issued to all students passing satisfactory examinations on the above subjects.

COURSE IN FARM MECHANICS

January 8 to May 31

Modern agricultural methods have introduced the steam and gas engine, as a substitute for animal power, in such a marked degree, that the consequent growing demand for traction engineers has led the College to arrange a five months' course for the special training of such engineers. Extreme care has been taken to offer only such work as will prove valuable to the man running the traction engine and other machinery. A relatively large amount of shop work and engine practice is introduced.

For the work in engine practice several of the most modern types of both steam and gas traction engines are available. Enough time is devoted to this part of the work to make each student thoroughly familiar with all of the engines, and able to operate them satisfactorily in actual practice. The engine practice work generally starts as soon as the frost is out of the ground, or about April 10th, and continues to the end of the term.

A series of lectures on the gas engine, with particular reference to its application to the tractor and the automobile, is given.

A proper proportion of recitations in closely allied subjects is also included in this course.

The tuition is eight dollars for the entire course with a small amount extra for laboratory fees.

Upon the satisfactory completion of the work the student is given a certificate which is virtually the same as a license to run an engine in this state.

Students who desire to take this course are expected to pass a satisfactory examination in arithmetic, to read intelligently and to show such general elementary training as will indicate that they are able to understand the subjects embraced in this course.

The work offered is as follows:

	periods per week
Arithmetic	5
Heat Engines and Elementary Physics	5
Stock Judging	2½
Steam and Gas Engine Lectures	2½
Forging	2½
Mechanical Drawing	2½
Steam and Gas Engine Practice	2

Agricultural Experiment Station

Station Staff

T. W. Dwight .....Member Regents' Committee for the College
J. W. Campbell .....Member Regents' Committee for the College
Ellwood C. Perisho .....President of the College
James W. Wilson .....Director and Animal Husbandman
Niels E. Hansen .....Vice Director and Horticulturist
James H. Shepard .....Chemist
Christian Larsen .....Dairy Husbandman
Albert N. Hume....Agronomist and Superintendent of Sub-Stations
H. C. Severin .....Entomologist
Joseph Gladden Hutton .....Associate Agronomist
Manley Champlin...Assistant Agronomist and Collaborator with U. S. Department of Agriculture.
Howard Loomis .....Agronomy Analyst
Matthew Fowlds .....Assistant in Crops
H. W. Gregory .....Assistant Dairy Husbandman
Edwin H. Hungerford .....Dairy Analyst
Vern R. Jones..Assistant Dairy Husbandman and Dairy Bacteriologist
Harry Rilling .....Assistant Agronomist
Arthur Lynch .....Assistant Dairy Husbandman
R. C. Sherwood .....Assistant Chemist
Fred C. Stoltenberg .....Assistant Horticulturist
R. A. Larson .....Secretary

Under the provisions of the Hatch Act of March 2, 1887, and the Adams Act of March 20, 1906, the state receives annually $30,000 from the treasury of the United States for the maintenance of an experiment station. By an act of the legislature this institution was made a part of the South Dakota Agricultural College. Its object is to investigate along agricultural lines, publish the results in bulletin form and distribute them to the residents of the state for their information and benefit. It consists of five divisions, namely; agronomy, animal husbandry, dairy, horticulture and chemistry.

Each of these divisions is in charge of an expert who is also professor of the same subject in the College.

About sixty acres of the college farm are set aside for experiments in crop rotion and testing varieties of grains.

Another tract of sixty acres is utilized for experiments along horticultural lines, where trees, shrubs and vines are grown in profusion. Adaptation of grains, grasses, forage plants, fruits, trees, shrubs and vegetables for the Northwest is being carried on in co-operation with the United States Department of Agriculture and as a result many valuable varieties have been introduced which probably would not otherwise have reached us.

Each division is provided by the state with the proper facilities to conduct investigations, and at least four bulletins are published annually, which are free to residents of the state. Inquiries pertaining to the various agricultural interests are answered promptly. The regular bulletin mailing list of the station numbers over 22,000 names.

All communications to this department should be addressed to the Director.

Agricultural Extension Division

Extension Staff

Ellwood C. Perisho ..... President
Gordon W. Randlett ..... Director
Nannie Lineburg ..... Secretary
H. E. Dawes ..... Assistant Superintendent of Short Courses
W. M. Mair ..... Superintendent Boys' and Girls' Clubs
Guy E. Morrison ..... Specialist in Live Stock Improvement
W. A. Ostrander ..... Farm Management Demonstrator
T. A. Meehan ..... Specialist in Dairying (Manufacture)
Frank E. McCall ..... Specialist in Horticulture
Ralph L. Patty ..... Specialist in Agricultural Engineering
Dilla E. Wimple, Specialist in Home Economics (Food Conservation)
Gertrude Erickson, Specialist in Home Economics (Food Preparation)
Agnes Morton ..... Assistant Club Leader
Geo. Gilbertson ..... Specialist in Insect Control
J. T. E. Dinwoodie ..... Specialist in Animal Disease Control
J. G. Hutton ..... Specialist in Soils
Manley Champlin ..... Specialist in Field Crops
W. E. Lyman ..... Agent, Lawrence County
Ralph E. Johnston ..... Agent, Fall River County
Dick Lewallen ..... Agent, Lyman and Jones Counties
E. C. Bird ..... Agent, Douglas County
A. W. Palm ..... Agent, Codington County
Leslie V. Ausman ..... Agent, Clark County
E. W. Hall ..... Agent, Spink County
O. P. Drake ..... Agent, Beadle County
A. R. Wije ..... Agent, Kingsbury County
W. W. Underwood ..... Agent, Hughes County
Vey J. Valentine ..... Agent, Stanley County
R. O. Swanson ..... Agent, Miner County
Harry Rilling ..... Agent, Jerauld County

In 1914 Congress passed the Smith-Lever Act, appropriating a considerable sum of money to the various states in which Agricultural Extension work including Home Economics should be established. The state of South Dakota in its last Legislative Session met the requirements of the Federal Act by appropriating $68,000 for the next biennial period to be used in Agricultural Extension including county agent work. Activities are carried on under the project plan as follows:

1. **County Agent Project.**
2. **Short Course Project.**

3. Boy and Girl Club Project.
4. Dairying (Manufacture) Project.
5. Farm Management Project.
6. Live Stock Project.
7. Horticulture Project.
8. Agricultural Engineering Project.
9. Animal Disease Control Project.
10. Home Economics Project.
11. Grasshopper Control Project.
12. Soil Fertility Project.
13. Field Crop Improvement Project.

The following projects will be added as soon as funds permit and suitable specialists found: Marketing, Dairying (Production), and Plant Disease Control.

Any county in the state may secure the benefits of Federal and State appropriations in the following manner: It shall be lawful for 50 or more freeholders residing in at least one-third of the congressional townships of the county, to organize and incorporate an Agricultural Extension Association. The members of the association shall pay a membership fee of $1.00 and shall file articles of incorporation with the Secretary of State, and elect a board of directors. The Directors may secure an appropriation from the County Board of Commissioners which may be deposited with the Treasurer of State and be augmented from state funds by 60 per cent. of the amount so deposited. The county is then in a position to ask for Federal assistance.

The state law provides for the conducting of demonstration courses in Agriculture and Home Economics in all counties not employing a county agent. This work is under the immediate supervision of the Short Course Superintendent and is conducted during the late fall and winter months. It takes the place of Farmers' Institutes of former years.

Boy and Girl Club Work is carried on usually in co-operation with the county agent or the county superintendent of schools. This work is in charge of a State Club Leader and an Assistant Leader. It consists in the organization of boys and girls between the ages of 10 and 18 years into clubs for the purpose of corn growing, economical pig raising, gardening and canning, bread and garment making, and so forth.

Workers in other projects are detailed to the various

communities where their special services may be needed. With the exception of the County Agents all other extension wrokers are employed and their work administered directly by the Extension Division of the State College.

Communities desiring demonstrations in any of the lines suggested by the list of projects should write to the Director.

College Alumni

ALUMNI ASSOCIATION

I. B. Johnson, '03 .....President
A. C. Dillman, '07 .....First Vice-President
Manley Champlin, '09 .....Second Vice-President
Cleveland Abbott, '16 .....Third Vice-President
H. B. Mathews, '92 .....Secretary and Treasurer

Class of 1886

BACHELOR OF SCIENCE

Sayler, Marcus A. .....Fruit Grower, Orland, Cal.

Class of 1888

BACHELOR OF SCIENCE

Aldrich, John M. .....With U. S. Bureau of Entomology,
.....316 S. Grant St., West, Lafayette, Ind.
Lawrence, Philip A. .....Attorney, Fargo, N. D.
Wellman, Lulah (Hewes) .....Lakewood, N. Y.

Class of 1889

BACHELOR OF SCIENCE

Boswell, Katie (Arnold) .....Kennebec
Cranston, Mary (Crane) .....04303 Lincoln St., Spokane, Wash.
Cross, Alvah G. .....
Eno, Durell G. .....Merchant, Platte
Grady, Francis A. .....Attorney, Crookston, Minn.
Haber, Sarah (Cunningham) .....1015 Grand Blvd., Spokane, Wash.
Korstad, Hans .....Rural Mail Carrier, Brookings
Larson, Lars K. .....Bank Cashier, Dell Rapids
Lawshe, Grace (Brooke) Art Dept. of Woman's Work Exchange,
.....710 Marshall Ave., St. Paul, Minn.
McKenney, Duston W. .....Supervisor Manual Training,
..... 302 Lewis Ave., Billings, Mont.
McLouth, Lewis C. .....Gen. Mgr. Miniature Sales Co.
.....1228 Chamber Com., Detroit, Mich.
Mork, Albert A. .....Farmer, Grelland, N. D.
Roe, Ellen (Aldrich) .....Died Dec. 8th, 1897, at Helena, Mont.
Rogers, Edmund .....Machinist, 104 Eleventh St., Milwaukee, Wis.
Ross, Carrie (Orcutt) .....518 W. Third St., Northfield, Minn.
Ross, Abbie (Wesche) .....Webb, Ia.

Wardall, Anna (Scott) .....
.....Osteopath, 3201 Forty-first Ave., S. W., Seattle, Wash.

Class of 1890

BACHELOR OF SCIENCE

Allen, William C. .....Died in Chicago
Day, John M. .....Farmer, Ekalaka, Mont.
Duffey, Maggie (Irish) .....1227 Childress Ave., St. Louis, Mo.
Egeburg, Hildus .....Farmer, Brookings
Haasarud, Ole H. .....Farmer, Bratsburg, Minn.
Harkins, Lilla A., Prof. of Dom. Science, 613 S. Grand Ave....
..... Montana Agricultural College, Bozeman
Hopkins, Cyril G., Prof. of Agronomy, Chemist and Vice Director
....of Exp. Sta., U. of Illinois, 1001 S. Wright St., Champaign
Jenkins, John C. .....Attorney, 815 Spaulding Bldg., Portland, Ore.
Kenyon, Arthur H. .....Lawyer, 1315 Mallon Ave., Spokane, Wash.
Pyne, Estel W. ....Capitalist, 633 S. Union Ave., Los Angeles, Cal.
Roe, Guy W. .....State Mgr. Union Fibre Co., Seattle, Wash.
Stoner, Minna A. .....Home Economics Lecturer, Woonsocket
Wardall, Norman M. .....2215 41st Ave., S. W., Seattle, Wash.

Class of 1891

MASTER OF SCIENCE

Aldrich John M., With U. S. Bureau of Entomology .....
.....Lafayette, Ind., 316 S. Grant St., West Lafayette, Ind.

BACHELOR OF SCIENCE

Aldrich, Irwin D., Editor and Sec. State Board of Regents, Big Stone
Bell, William D. .....
.....Mgr. Am. Motorists Ass'n, Upham Bldg., St. Paul, Minn.
Bentley, Wm. S. .....Physician, Rapid City
Chamberlain, Jennie (Spooner) .....
.....Physician, 813 4th Ave., Detroit, Mich.
Crane, Austin B., Prof. of Math. and Civil Eng., Spokane Univ.
.....04303 Lincoln St., Spokane
Davis, Homer .....Physician, Genoa, Neb.
Dillon, Willis C. .....
Doughty, Hettie (Dibble) .....Beresford
Frick, Mary (Magaw) .....903 W. Zumbro St., Rochester, Minn.
Hann, Jay B. .....Photographer, Bellingham, Wash.
Houston, Grant .....Physician, 201 W. Chicago St., Joliet, Ill.
Irish, Henry C. ....Horticulturist, 1227 Childress Ave., St. Louis, Mo.
Lewis, Perry .....Inventor, 101 E. Cherry St., Mankato, Minn.
Robinson, Alice (Haberlein), 1710 Arlington Ave., Los Angeles, Cal.
Shannon, Fanny (Fourt) .....Fairfield, Iowa
Solberg, Halvor C. ....Prof. Steam and Mechanical Eng., S. D. S. C.
Updyke, Nora (Bacon) .....2211 Elizabeth St., Pueblo, Colo.

Valleau, Vinal B. .....Moving Picture Theaters, Albert Lea, Minn.
West, Hugh H. .....Physician, Spurling Bldg., Elgin, Ill.
Wolgemuth, Lee E. .....Real Estate, Hamilton, Mont.

Class of 1892

BACHELOR OF SCIENCE

Austin, Steven E., ...Mechanical Engineer, Chicago
Davis, Samuel H. .....Farmer, Beaverton, Ore.
Griffiths, David, Asst. Agronomist .....
.....Dept. of Agriculture, Tacoma Park, Washington, D. C.
Hamlin, John R., Jr. .....Merchant, Hawthorne, Cal.
Harding, Albert S., Prof. of History & Political Science, S. D. S. C.
Hatfield, Ira A. .....Died Feb. 8th, 1914, at Lincoln, Neb.
Keeney, Emma (Ferris) .....Springfield, Ore.
McAndrew, James E. .....Lawyer, 808 Realty Blk., Spokane, Wash.
McLouth, Ida B. .....Died Aug. 27, 1899, at Short Beach, Conn.
Madden, Marguerite (Akin) .....Brookings
Mathews, Hubert B. .....Prof. of Physics, S. D. S. C.
Plocker, Eva (Mathews) .....Brookings
Schlosser, Thomas F. .....Clergyman, Carleton, Ore.
Sloan, Nettie (Torrence) .....Redlands, Cal.
Snell, Effie (Clark), 400 E. 14th St., University Place, Lincoln, Neb.
Whitten, John C. .....Prof. of Hort., U. of Missouri, Columbia
Winegar, Albert J. .....Life Insurance, Box 425, Beloit, Wis.

Class of 1893

MASTER OF SCIENCE

Griffiths, David, Asst. Agronomist .....
.....Dept. of Agriculture, Tacoma Park, Washington, D. C.

BACHELOR OF SCIENCE

Bates, Edmund T. .....Farmer, Wyoming, Iowa
Beck, Milton .....Engineer, Monroe, Mich.
Edgerton, Wm. M. ....Physician, 2102 Dayton Ave., St. Paul, Minn.
McLouth, Benjamin F., Ins. Agent .....
.....L. A. Investment Bldg., Los Angeles, Cal.
Robertson, Ada N. .....Teacher, R. F. D. No. 225, Anaheim, Cal.
Robertson, Clarence H., Science Teacher and Y. M. C. A. Sec.
..for China, Care Y. M. C. A., 124 E. 28th St., New York, N. Y.
Schoppe, W. J. A. .....Farmer, Groton

Class of 1894

MASTER OF SCIENCE

Plocker, Eva (Mathews) .....Brookings
Wolgemuth, Lee E. .....Real Estate, Hamilton, Mont.

BACHELOR OF SCIENCE

Brown, Cyrus O. .....Attorney, Douglas, Wyo.
Brown, James A. .....Attorney, 816 Sec. Mut. Bldg., Lincoln, Neb.
Dibble, Hattie (Stow) .....College Station, Pullman, Wn.
Hopkins, Mrs. C. G. .....1001 S. Wright St., Champaign, Ill.
Luke, Fred K. .....Farmer, R. F. D. No. 2, Kalispell, Mont.
Parker, Fannie (Spooner) .....Brookings
Sproul, Alex H., Director Com. Dept., State Normal, ...
.....584 E. 13th St. N., Portland, Ore.
Tanzy, Marvin F. .....Died Feb. 8, 1900, at Canton, S. D.
Waters, Geo. D. ...Real Estate, 1702 Central Ave., Indianapolis, Ind.
Williams, Elinor (Knox) .....Phoenix, Arizona
Young, Gilbert A., Prof. of Mech. Eng., Purdue Univ. .....
.....739 Owen St., Lafayette, Ind.

Class of 1895

MASTER OF SCIENCE

McKenney, Duston W., Supervisor Manual Training .....
.....302 Lewis Ave., Billings, Mont.
Schoppe, W. J. A. .....Farmer, Groton
Sproul, Alex H., Director Com. Dept., State normal, ...
..... 584 E. 13th St. N., Portland, Ore.

BACHELOR OF SCIENCE

Allison, Wm. F., Prof. of Civil Eng., U. of Wash., Seattle, Wash.
Brown, Sarah .....Shannon City, Iowa
Cornell, Harry M. .....Real Estate, Mott, N. D.
Mayland, Mabel (Merrick) .....Troy, Kan.
Parker, Anna (Moore) .....Brookings
Salisbury, Edith (Robertson) Care Y. M. C. A., 124 E. 28th St.,
.....New York, N. Y.
Sevy, Isaac B. .....Teacher, Freewater, Oregon
Sproul, Wm. T., Gen. Mgr. Ingersoll Milling Machine Co. .....
.....1751 Clinton St., Rockford, Ill.
Thornber, John J. .....Prof. of Botany, U. of Arizona, Tucson
Wilcox, Ernest N. .....Farmer, Thawville, Ill.

PHARMACY GRADUATES

Briggs, Elmer E. .....Farmer, Muscoda, Wis.
Knox, Wm. H. .....With U. S. Dept. of Agr., Phoenix, Arizona
Lentz, Elmer A. .....Dentist, Brookings
Murphy, Wm. .....Died July 5, 1896, at Brookings
Whitehead, B. T. .....Died April 1, 1913, at Brookings

Class of 1896

MASTER OF SCIENCE

Brown, James A. .....Attorney, 816 Sec. Mut. Bldg., Lincoln, Neb.
Luke, Fred K. .....Farmer, R. F. D. No. 2, Kalispel, Mont.
Robertson, Ada N. .....Teacher, R. F. D. No. 225, Anaheim, Cal.
Snell, Effie (Clark), 400 E. 14th St., University Place, Lincoln, Neb.
Wilcox, Ernest N. .....Farmer, Thawville, Ill.

BACHELOR OF SCIENCE

Atkinson, Jesse C. .....Farmer, Allegan, Mich.
Carter, Louis W. .....Register of Deeds, Highmore
Dibble, Ida (Brown) .....816 Sec. Mut. Bldg., Lincoln, Neb.
Downing, Jennie C. .....Tel. Mgr., Rathdrum, Idaho
Grattan, Paul H. .....Traveling Salesman, St. Paul, Minn.
Hegeman, Harry A., Captain, 19th Infantry, U. S. A., El Paso, Tex.
Holm, Andrew B. .....Accountant, Brookings
Hoy, Howard H. ..Asso. Prof. of Phys. and Mech. Eng., S. D. S. C.
Korstad, Mary .....Brookings
Lusk, Willard C. .....Editor Yankton Press and Dakotan, Yankton
Mathews, Alta (Smith) .....Pepperwood, Cal.
Mathews, Nora (Hoy) .....Brookings
Sasse, Ernest G. .....Physician, Lingerwood, N. D.
Williamson, Albert .....Attorney, Kennebec

PHARMACY GRADUATES

Cotter, J. C. .....Merchant, Dell Rapids
Grove, Eugene .....Physician, Arlington, S. D.
Moore, Thomas .....Druggist, Waterloo, Ia.
Palmer, Horton .....Druggist, 426 S. Sycamore St., Santa Ana, Cal.
Sherwin, Frank .....Merchant, Willamina, Ore.

Class of 1897

MASTER OF SCIENCE

Davis, Homer .....Physician, Genoa, Neb.

BACHELOR OF SCIENCE

Ainsworth, Cephas B. .....Land, 406 Idaho St., Lewiston, Mont.
Atkinson, George ..Map Publisher, La Fleche, Saskatchewan, Canada
Atkinson, Walter., Civil Engineering, 632 W. 67th St., Chicago, Ill.
Boyden, Frank E., Physician and Surgeon .....
.....116 Lewis St., Pendleton, Oregon
Clevenger, John W. .....Dentist, Chamberlain
Hargis, Christie (Saylor) .....1019 6th Ave., E. Des Moines, Iowa
Hazel, Wm. A. .....Lawyer, 208 6th Ave., S. E., Aberdeen

Husted, Harley H. .....Died Jan. 14th, 1907, at Lincoln, Neb.
Jolley, Wm. G. .....Supt. of Schools, Cumberland, Wn.
Madden, Cassie (Crowley), Stenog. 625 9th St. S., Minneapolis, Minn.
Olson, Eva .....Teacher, 221 4th Ave., N., South St. Paul, Minn.
Parsons, Thos. S. .....Prof. of Agro., U. of Wyo., Laramie, Wyo.
Roe, Robert .....Stockman, Highmore
Shuster, John W., Asso. Prof. Elec. Eng., U. of Wisconsin, Madison
Thornber, Walter S., Director Extension Work, Washington State College .....Pullman
Walters, Wm. H. .....Grain Buyer, Bruce
West, Orpha (Sevy) .....Freewater, Ore.
Whaley, Neva (Harding) .....Brookings
Whitehead, Bower T. .....Died April 1, 1917, at Brookings
Wilcox, Alice (Remsburg) .....Thawville, Ill.
Work, Lloyd E. ....Bond Salesman, 10 S. La Salle St., Chicago, Ill.
Young, Grace (Bullen) .....260 Jessup St., Portland, Ore.

Class of 1898

MASTER OF SCIENCE

Chilcott, E. C., Agronomist in charge of Dry Land Agriculture, ...Washington, D. C.
Harkins, Lilla A., Prof. Domestic Science ....Montana Agri. College, Bozeman, Mont.
Parsons, Thos. S. .....Prof. of Agro., U. of Wyo., Laramie

BACHELOR OF SCIENCE

Ainsworth, Howard, Fruit Grower ....R. F. D. No. 17, Mountain View, Cal.
Ainsworth, Flora (Hazle) .....208 6th Ave., S. E., Aberdeen
Barton, Alice (White) ...R. F. D. No. 7, Box 25 D., Santa Ana, Cal.
Beck, Louis .....Engineer "Ana Dean Farm," Barberton, O.
Bolles, Myrick N. .....Farmer, Brookings
Curtiss, Elsie (Crane) .....Kettle Falls, Wash.
Davidson, Margaret (Crane) .....2917, 18th St., Spokane, Wash.
Fjerestad, Hans C. .....Merchant, 655 S. Main Ave., Sioux Falls
Harding, Charles, J. .....Teacher, Carpenter, S. D.
Hegeman, Maude (Boyden) .....116 Lewis St., Pendleton, Ore.
Hegeman, Mabel (Allison) .....Univ. of Wash., Seattle, Wash.
Hodgeson, Herbert H., Top. Eng., U. S. Geol. Survey, Wash., D. C.
Knox, Wm. H. .....With U. S. Dept. of Agr., Phoenix, Arizona
Lawrence, Claude W. .....Farmer, Sequim, Wash.
Lawrence, Clay .....Lawyer, Pioneer Bldg., Seattle, Wash.
Loveland, Addie (Towne) ....2104 Penn. Ave. S., Minneapolis, Minn.
Paddock, Jay M. .....Died Dec. 16, 1916, at Eugene, Ore.
Riemann, Edith (Adams) .....Oak Park, Ill.
Thornber, Wm. T. .....Farmer, Colman

Towne, Judson, Teacher Physics, E. Side H. S. .....
.....2104 Penn. Ave. S., Minneapolis, Minn.

PHARMACY GRADUATES

Beebe, Jay L. .....Physician and Surgeon, Anaheim, Cal.
Clevenger, J. W. .....Dentist, Chamberlain
Holsey, Joseph .....Druggist, Veblen
Lee, Berton E. .....Accountant, 104 S. 4th St., Mankato, Minn.

Class of 1899

MASTER OF SCIENCE

Dibble, Hattie (Stow) .....College Station, Pullman, Wn.
Mathews, Hubert B. .....Prof. of Physics, S. D. S. C.
Thornber, Walter S., Director Extension Work, Washington State
College ..... Pullman
Whitten, John C. .....Prof. of Hort., U. of Missouri, Columbia

BACHELOR OF SCIENCE

Colegrove, Ina (Nelson) Care Bureau of Standards, Washington, D. C.
Findeis, Philip .....Lumber Merchant, Miranda
Lawrence, Mary M., Home Economics, Pioneer Bldg., Seattle, Wn.
Lawrence, Wm. H., Prof. of Horticulture, University of Missouri,
..... Columbia
Mason, Nellie (Mason) .....Albia, Iowa
Nachtigal, Isaac .....Accountant, Ortonville, Minn.
Sherwin, Howard H., Civil Engineer, 70 N. Y. Ave., Brooklyn, N. Y.
Walter, Edith (Frystrom) ....Died May 16, 1910, at Geneseo, N. D.
West, George .....Physician, Armstrong,Iowa

PHARMACY GRADUATES

Carr, George .....Druggist, Bison
Crowley, D. C. .....Druggist, Portland, Ore.
Hepner, Frank .....Asst. Chemist, U. of Wyoming, Laramie
Kendall, Clinton D. .....Druggist, Brookings
Lindsey, Charles .....Farmer, Winifred
Oulton, Frank .....Abstrator, Choteau, Mont.
Shriver, E. M. .....Real Estate, Coos Bay, North Bend, Ore.
Taylor, C. DeWitt .....

Class of 1900

BACHELOR OF SCIENCE

Allen, Hart M. .....Druggist, Maysville, Cal.
Anderson, Clark W. .....Died March 6th, 1902, at Brookings
Beebe, Jay L. .....Physician and Surgeon, Anaheim, Cal.
Carlson, Esther (Lilygreen) .....701 Magnolia St., St. Paul, Minn.

Carlson, Ella (Howard) .....Lake Preston
Davies, Sara (Sherwin) .....70 N. Y. Ave., Brooklyn, N. Y.
Davies, Mary (Hutchins) .....Falls City, Neb.
DeLa, John W. .....Lumber, Velva, N. D.
Doughty, Matthew W., Civil Engineer with Delaware & Lacka-
.....wana Ry., Hoboken, N. J.
Grove, Frank W. .....Dentist, Delta, Colo.
Harza, Carl .....Electrician, 21 Scovel Place, Detroit, Mich.
Kendall, Clinton D. .....Druggist, Brookings
Lawrence, Jessie (Hagerman) .....R. 1, Auburn, Wash.
Mathews, Alice (Albright) ....1323, 6th Ave. N., Great Falls, Mont.
Mathews, Roscoe A., Coal and Feed, 1323 6th Ave. N. .....
.....Great Falls, Mont.
Morrison, Freda (Cole) .....Wenatchee, Wash.
Olson, Gustava (Hodgeson) .....Linden, Md.
Williams, Callie (Olson) .....116 N. Summit Ave., Sioux Falls

PHARMACY GRADUATES

Bentley, Wm. S. .....Physician and Surgeon, Rapid City
Brosseau, Jessie E. .....Physician and Surgeon, Frankfort
Baldwin, Corwin B., Druggist and Member State Board of....
Pharmacy .....Rapid City
Connell, John C. .....Druggist, Luverne, Minn.
Else, Earl, Physician and Surgeon, Broadway Bldg., Portland, Ore.
Eckhart, Henry .....Died at Menno, S. D.
George, William .....Physician and Surgeon, Selby
Hart, Bertrand .....Physician and Surgeon, Blunt
Jones, Robert .....Druggist, Madison
West, Hugh H. ....Physician and Surgeon, Spurling Bldg., Elgin, Ill.

Class of 1901

MASTER OF SCIENCE

Knox, Wm. H. .....With U. S. Dept. of Agr., Phoenix, Arizona
Whitehead, Bower T. .....Died April 1, 1917, at Brookings

BACHELOR OF SCIENCE

Bagley, Sussana..Teacher, 3012 Ezekiel St., Lake Co., Zion City, Ill.
Bolles, Laura Jane .....Brookings
Brosseau, Jesse E. .....Physician, Frankfort
Boyd, Mary (Labbitt) .....392 Davis St., Sioux City, Iowa
Cranston, Margaret (Young)..Died June 7th, 1907, at Oakes, N. D.
Culhane, Michael E. .....Culhane Adjustment Co., Brookings
Davies, Autumn .....Instructor in History, H. S., Omaha, Neb.
Dodge, Fred E. .....Hotel Mgr., Redfield
Else, Earl, Physician and Surgeon, Broadway Bldg., Portland, Ore.
Enos, Winifred (Kendall) .....Brookings

Erickson, Martin L. .....Forestry Service, Medford, Ore.
Evans, Lina (Roskie) .....Custer
Fishback, Myra (Kennedy) .....86 College St., Calcutta, India
Harza, LeRoy F. .....Civil Eng., Sault St. Marie, Mich.
Hatton, John H. .....Forestry Service, Forestry Bldg., Denver, Colo.
Johnson, Rhoda (Lee) .....Died Oct. 18, 1909, Denver, Colo.
Kendall, Leonard J. .....Telegraph Operator, Brookings
Kennedy, C. Leroy .....
.....Fruit Raiser, R. F. D. No. 18, Mountain View, Cal.
Langdon, Lillian (Culhane) .....Brookings
McElmurry, Loretta, Instructor Domestic Science, State Normal,
.....Madison, S. D.
Mork, Theodore .....Farmer, Des Lacs, N. D.
Phillips, Florence (Haas) .....Arlington
Phillips, C. Louise ....Librarian, U. S. Dept. Agr., Washington, D. C.

PHARMACY GRADUATES

Cornell, Edward, Pharmacist .....
.....1824 Lyndale Ave., S., Minneapolis, Minn.
Tidball, Clyde .....Druggist, Brookings

Class of 1902

BACHELOR OF SCIENCE

Fleming, Michael, City Mgr., M. A. Hanna Coal Co., St. Paul, Minn.
George, William A. .....Physician and Surgeon, Selby
Hart, Bertrand M. .....Physician and Surgeon, Blunt
Hepner, Frank E., Asst. Station Chemist, U. of Wyoming, Laramie
Johnson, Clara (Johnson) .....Brookings
Johnson, Edward .....Died May 1, 1907, Tacoma, Wash.
Kephart, George .....Lawyer, Iowa Building, Sioux City, Ia.
Lee, Berton E. .....Accountant, 104 S. 4th St., Mankato, Minn.
Ramsey, Henry J., Expert in Fruit Storage, Bureau Plant Industry .....Washington, D. C.
Roskie, Geo. .....Forester, Custer
Thornber, Edith (Cuckow) .....La Junta, Colo.
Trooien, Ole N. .....Died at Brookings, Dec. 21, 1915
Winegar, Laura .....Nurse, Brookings

PHARMACY GRADUATES

Allison, Wm. F., Prof. of Civil Eng., U. of Washington .....
..... Seattle, Wash.
Boyden, Frank E., Physician and Surgeon, 116 Lewis St.....
..... Pendleton, Ore.
Christianson, Bernett .....Druggist, Lake Preston
Jarratt, Arthur A. .....Druggist, Colman
Jarvis, S. Hall .....Druggist, Faulkton
Leighty, James A. .....Druggist, Winifred

Morton, Frederic M. .....Druggist, Lake City
Pickles, Chester E. .....Farmer, Elrod
Schnaidt, Henry, Druggist and President State Board of Pharmacy ..... Parkston
Schroeder, Anna (Gassman) .....Howard
Thomas, John C. .....Druggist, Marion

Class of 1903

MASTER OF SCIENCE

Crane, Austin B., Prof. of Math. and Civ. Eng., Spokane Univ., ... Spokane, Wash.
Hoy, Howard H.,..Asso. Prof. of Phys. and Mech. Eng., S. D. S. C.

BACHELOR OF SCIENCE

Almond, Fred C. .....Died March 12th, 1909, at Clear Lake
Cole, John S., Examiner of Dry Land Agr. Exp. Stations Dept. of Agr. .....989 So. Penn. Ave., Denver, Colo.
Colegrove, Lettie (Drew) .....Farmington, Minn.
Cuckow, Fred W. .....Lawyer, La Junta, Colo.
Hubbart, Minnie (Holbein) .....Minot, N. D.
Johnson, Isaac .....Lumberman, Brookings
Kendall, Krete (Miller) .....Brookings
Langdon, Alice .....Stenographer, Brookings
Miller, Shirley P. .....Professor Zoology, S. D. S. C.
Norton, Frank A. .....Fruit Grower, Grand View, Wash.
Otterness, Jens M., Private Secretary to Senator Sterling ....441 Senate Office Bldg., Washington, D. C.
Peirce, E. Esther .....Teacher, 524 E. Kemp St., Watertown
Sanborn, Ethel I., Instructor Univ. of Oregon ....670 12th Ave., E., Eugene, Ore.
Seide, Louise (Prell) .....Calamus, Iowa
Sarvis, Roscoe J., Telephone Engineer ....1321 7th St., S. E., Minneapolis, Minn.
Webster, James L. .....Farmer, Wenatchee, Wash.
Westcott, Geo. R., Asst. Engr., Mo. Pac. Ry. ....5764 Goodfellow Ave., St. Louis, Mo.

PHARMACY GRADUATES

Drew, Arthur W. .....Physician and Surgeon, Farmington, Minn.
Hall, Roy J. .....Druggist, Oldham
Heston, Edward C. .....Physician and Surgeon, Roslyn, Wash.
Hollister, Arthur R. .....Traveling Salesman, Madison
Howell, John E., Chemist, S. P. R. R. ....504 Avondale Ave., Houston, Texas
Johnston, Samuel .....Druggist, Hazel
Norton, Frank A. .....Fruit Grower, Grand View, Wash.
Steiner, Frederick W., Physician .....

.....323 Union Ave., Havre de Grace, Md.
Trumm, Robert E. .....Druggist, Hayti
Van Dusen, Fred J. .....Lead
Williams, Percy, Physician and Surgeon .....
.....557 Spring St., Los Angeles, Cal.
Young, Alfred J. .....Farmer, Adanac, Saskatchewan

Class of 1904

MASTER OF SCIENCE

Trooien, Ole N. .....Died in Brookings, Dec. 21, 1915

BACHELOR OF SCIENCE

Binford, Wm. W. .....Lumberman, Greenleaf, Idaho
Bushnell, Maude (Kelton) .....Poynette, Wis.
Loucks, Anna Y. (Brown) .....Brookings
Mattice, Albert F. .....Oculist, 1017 Cobb Bldg., Seattle, Wash.
McGarry, Lawrence R. .....Merchant, Mansfield
Ruth, Thomas H. .....Veterinary Surgeon, DeSmet
Sanderson, Everett G. .....Farmer, Aurora
Sherwin, Ralph L. .....Civil Engineer, Bay Harbor, Fla.
Smith, Wm. H. .....Missionary, Damaguete, P. I.
Thompson, Clarence .....Farmer, Dell Rapids
Walter, L. Erving .....Farmer, Conde

PHARMACY GRADUATES

Anderson, Ernest .....Druggist, South Shore
Dillon, Cornelius .....Druggist, Hotel Smede Bldg., Eugene, Ore.
Frick, Harry E. .....Merchant, Mitchell
Goodale, Alton R. .....Druggist, Angeles Pharm., Los Angeles, Cal.
Hooker, Henry .....Physician, Danville, Ill.
Koch, Arthur E. .....Attorney, 621 Ford Bldg., Detroit, Mich.
Ramsdell, Leonard C. ...Druggist, 901 Riverside Ave., Spokane, Wn.
Thompson, Gottfrey .....Physician and Surgeon, Sioux Falls
Weisflock, Theodore .....Druggist, Frankfort

Class of 1905

MASTER OF SCIENCE

Hepner, Frank E., Asst. Station Chemist, U. of Wyoming, Laramie
Norton, Frank A. .....Fruit Grower, Grand View, Wash.
Phillips, C. Louise, Librarian, Bureau of Plant Industry, Grain Standardization ..... Washington, D. C.
Thompson, Clarence .....Farmer, Dell Rapids
Walter, L. Erving .....Farmer, Conde

BACHELOR OF SCIENCE

Boyden, Guy L., Physician and Surgeon .....

.....412 Perkins St., Pendleton, Ore.
Chappell, Bessie .....Teacher, Lamar, Colo.
Chappell, Elsie (Wilson) .....Brookings
Davis, Clifford, W. .....Farmer, 2337 Grant St., Berkley, Cal.
Elliott, Roy K. ....Electrician, 20 Bay State Ave., Somerville, Mass.
Fassett, Della (Loucks) .....Watertown
Fishback, Van Dusen .....Loans, Brookings
Forrest, Victor E., ...Contractor, 408 9th St., Minneapolis, Minn.
Fulkerson, Vincent .....Special Agent, Dept. of Agr., Fallon, Nev.
Grove, Mary (Potter) .....Univ. of Tenn., Nashville
Hage, Mary (Potter) .....Univ. of Tenn., Nashville
Howg, Edwin M. .....Physician and Surgeon, New Effington
Jensen, Lewis N., Special Agent U. S. Dept. Agri., Amarillo, Texas
Johnson, Carl L., Electrician .....
.....1517 Eastern Broadway, Schenectady, N. Y.
Mathews, Harry E. .....Railway Service, Las Vegas, Nevada
Miller, Ralph L. .....Lumberman, Melville, N. D.
Murphy, Matt W. .....Lawyer, 408 8th Ave. S., Fargo, N. D.
Nelson, John Harland .....Bureau of Standards, Washington D. C.
Ronning, Oscar E. .....Rural Mail Carrier, Hayti
Schaphorst, Wm. F., Technical Writer, ...
.....Woolworth Bldg., New York City
Seeger, Adolph M. .....Elec. Eng., Light & Power Co., Toledo, O.
Slocum, Ina S. (Deeley) ....2818 Granville St. S., Vancouver, B. C.
Thogerson, Arthur A. .....Contractor, 437 C. of C., Portland, Ore.
Walters, Daisy .....Teacher, Bruce
Williams, Harry, Real Estate .....
.....L. A. Investment Bldg., Los Angeles, Cal.
Williams, Percy, Physician and Surgeon .....
.....557 S. Spring St., Los Angeles, Cal.

PHARMACY GRADUATES

Fjerestad, Carl .....Druggist, Elkton
Howg, Edwin M. .....Physician and Surgeon, New Effington
Larson, Lars P. .....Teacher, R. 5, Howard
Mathews, Harry E. .....Railway Service, Las Vegas, Nevada
McCurdy, Walter .....Banker, Lane
Morton, Grant J., Federal Drug Ins. .....
.....105 Custom House, Portland, Ore.
Pottinger, Geo. .....Druggist, Valley Springs
Thompson, Clarence .....Farmer, Dell Rapids
Volin, Porter .....Physician, Lennox

Class of 1906

BACHELOR OF SCIENCE

Aldrich, G. Malcolm, Prin. Calhoun Schools .....
.....3205 Hennepin Ave., Minneapolis, Minn.

Barrett, J. Wylie .....Electrical Engineer, Plankinton
Bonesteel, Bee (Dillman) .....Newell
Brownell, Ellen (Wellington) .....Calipatua, Cal.
Burghardt, Roy D. .....Electrician, 1007, 1st Ave., Seattle, Wash.
Carpenter, Abbie J., Domestic Science Teacher .....
.....524½ Broadway, Seattle, Wash.
Chilcott, Ellery F. .....Supt. Ex. Station, Woodward, Okla.
Coller, Fred A., Physician and Surgeon .....
.....658 W. Jefferson St., Los Angeles, Cal.
Davies, Gladys (Grace) .....Akron, Colo.
Erstad, Alfred J., Electrician, Standard Mach. Co., Portland, Ore.
Evans, Edna V. .....Bank Clerk, Brookings
Grace, Oliver .....Supt. U. S. Ex. Sta., Akron, Colo.
Kennard, Frank L., Agronomy, N. W. Exp. Station, Crookston, Minn.
Knox, Arthur H. .....Farmer, Alpena
Koch, Arthur E. .....Lawyer, 621 Ford Bldg., Detroit, Mich.
Moffatt, Margaret E. .....Teacher, Bruce
Reich, Rose M. .....Teacher, Tunnel City, Wis.
Thornber, Jessie B. .....La Junta, Colo.
Youngberg, Guy E. ....P. G. Student, Harvard Univ., Boston, Mass.

PHARMACY GRADUATES

Allison, Harold .....Physician and Surgeon, Heppner, Ore.
Bergeim, Olaf, Asst. in Chem., Jefferson Med. College .....
.....10th and Walnut Sts., Philadelphia, Pa.
Davies, Gladys (Grace) .....Akron, Colo.
Harben, Bartlett L. .....Died June 10, 1912, at Winner, S. D.
Holm, A. B. .....Accountant, Brookings
Locke, Chas. .....Pharmacist, Brookings
Wipf, Michael J. .....Druggist, Alsen, N. D.

Class of 1907

MASTER OF SCIENCE

Culhane, Michael E. .....Of Culhane Adjustment Co., Brookings

BACHELOR OF SCIENCE

Binnewies, Mabel (Shanley) .....Brookings
Briggs, Stephen F., of Briggs & Stratton Co. .....
.....258 Milwaukee St., Milwaukee, Wis.
Burch, Walter S., Elec. Engr., with Rochester Railway and
Light Co. .....81 S. Fitzhugh St., Rochester, N. Y.
Christianson, Christine (Buck) .....1644 Adams St., Denver, Colo.
Dillman, Arthur C. .....Special Agent, Dept. of Agr., Newell
Dutcher, R. Adams, Prof. of Agr. Chem., Ore. Agr. College....
.....706 N. 12th St., Corvallis, Ore.
Elliott, Bruce A. .....Manual Training Teacher, Hibbing, Minn.
Elliott, Ross W. .....Manual Training Teacher, Hibbing, Minn.

Fjerestad, Alman .....Electrical Engineer, Estelline
Gagel, Gerald .....Electrician, Rialto, Cal.
Hofstetter, Geo., Instructor Manual Training, Govt. School ....
.....Box 487, Manila, P. I.
Kirk, John R. .....Farmer, Springfield
Johnson, Aaron G., Plant Pathologist, U. of Wis. .....
.....1910 West Lawn Ave., Madison, Wis.
Knutson, Mabel (Trooien) .....Teacher, Brookings
McCordic, Clare .....Farmer, Doland, S. D.
McElmurry, Rilla (Eels) ....129 Wellendorf Ave., Youngstown, O.
Morton, Grant J., Fed. Drug. Ins. .....
.....105 Custom House, Portland, Ore.
Reich, J. Carl, Western Elec. Co., Dept. Hawthorne Sta., Chicago, Ill.
Salmon, Cecil, Agronomist Kansas Agr. College .....
.....1630 Leavenworth, Manhattan
Sanderson, Eugene, Electrician, Care Power Eng. Dept., N. Y.
Telephone Co. .....Jersey City, N. J.
Tuttle, Volney J., General Electric Co., D. C. Eng. Dept. .....
.....Schnectady, N. Y.
Underwood, Genevieve (Schmidt) .....Bryant
Westcott, Ruth M. (Johnson)..1910 West Lawn Ave., Madison, Wis.
Work, Mary L. .....Stenographer, 3850 Indiana Ave., Chicago

PHARMACY GRADUATES

Dexter, David F. .....Druggist, Canton
Roney, Ray W. .....Druggist, Chester
Ennis, Herbert I. .....Druggist, Volga
Kartrude, Inga M. .....Teacher, Hardwick, Minn.

Class of 1908

MASTER OF SCIENCE

Coller, Fred A., Physician and Surgeon .....
.....658 W. Jefferson St., Los Angeles, Cal.
Koch, Arthur E. .....Lawyer, 621 Ford Bldg., Detroit, Mich.

ELECTRICAL ENGINEER

Elliott, Ross W. .....Manual Training, Hibbing, Minn.

BACHELOR OF SCIENCE

Alton, Benjamin H., Physician and Surgeon .....
.....Mass. Gen. Hosp., Boston, Mass.
Bergeim, Olaf, Asst. in Chemistry, Jefferson Med Co. .....
..... Philadelphia, Penn.
Carpenter, Clarence A., Electrical Engineer .....
....With Bureau of Standards, 1133 6th St., Washington, D. C.
Chilcott, Ralph .....Farmer, Vienna, Va.
Cooley, William R. .....Stockman, Springfield

Griffith, T. Edwin .....Farmer, Timmer, N. D.
Holsey, Ernest .....Elec. Eng., Y. M. C. A. Bldg., Spokane, Wash.
Hubbart, Edith J. .....Asst. Librarian, S. D. S. C.
Hyde, Hallie W. .....Inst. Dom. Sci., U. of Idaho, Moscow
Kelly, Amy .....Inst. Dom. Sci., U. of Idaho, Boise
Kendall, Nellie G. .....Instructor in English, S. D. S. C.
Locke, Francis ,.J Asst. Mgr. Western Electric Co. .....
.....38 W. 61st St., New York, N. Y.
Mathews, Oscar R. .....Expert, Dry Land Agr., Newell
Mayland, Amy .....Died Feb. 17, 1909, at Lincoln, Neb.
Mayland, George R. .....Farmer, Brookings
Nelson, Aaron L., Traveling Electrician, With G. E. Co., Brookings
Nilsson, Edward, Artist, Capital Engraving Co. .....
.....219 W. Edwards St., Springfield, Ill.
Olberg, Fred C. .....Druggist, Ballard, Wash.
Perry, William J. .....Elec. Eng., Corozol, Canal Zone
Soreng, Edward M., Electrician, with Briggs-Stratton Co. .....
.....198 15th St., Milwaukee, Wis.
Sperb, John J. .....Civil Eng., Woodburn, Ore.
Ulrich, Darwin William, Electrical Engineer .....
.....2605 Cal. Ave., Seattle, Wash.
Underwood, Beatrice .....Watertown
Underwood, Loto (White), Brooklyn Botanical Gardens .....
..... Brooklyn, N. Y.
Weeks, Gordon A., Electrical Engineer ....
.....711 Post St., Robbins, San Francisco, Cal.
West, Florence E. .....Hill Top Farm, Rhinebeck, N. Y.
Whitehead, Lindsey W. ....Instructor Civ. Eng., State College, Pa.
Williams, Ruby (Heil) .....921 W. 11th St., Riverside, Cal.

PHARMACY GRADUATES

Murphy, James P. .....Druggist, Rapid City
Hoch, Joseph L. .....Druggist, Tyndall
Olberg, Fred C. .....Druggist, Ballard, Wash.
Quiggle, Ernest J. .....Pharmacist, Groton

Class of 1909

MASTER OF SCIENCE

Mathews, Oscar R. .....Expert, Dry Land Agr., Newell

ELECTRICAL ENGINEER

Elliott, Bruce .....Manual Training Teacher, Hibbing, Minn.

MECHANICAL ENGINEER

Schaphorst, Wm., Technical Writer .....
.....Woolworth Building, New York City

BACHELOR OF SCIENCE

Bacon, Eva (Paulson) .....Castlewood

Bushnell, Edna .....Brookings
Camp, Fred .....Farmer, Winfred, Mont.
Catlett, Winifred ....Teacher Home Economics, Grand Rapids, Wis.
Champlin, Manley .....Asst. Prof. of Agronomy, S. D. S. C.
Clarke, Roy .....Chicago, Ill.
Coughlin, Chas., Supt. Construction, Briggs-Stratton Co. .....
.....258 Milwaukee St., Milwaukee, Wis.
Denhart, Cecil .....Grain Dealer, White
Erwin, Ada .....Brookings
Evans, Iva (Morrison) .....Brookings
Furnstahl, John .....Died Dec. 16, 1916, at Ajo, Arizona
Jensen, Harvey ..Real Estate, 943 Andrus Bldg, Minneapolis, Minn.
Jones, Robert .....Lawyer, Milbank
Kremer, Alvin .....Bookkeeper, U. S. Nat'l. Bank, Portland, Ore.
Lane, Lloyd .....Farmer, Beresford
McKeown, Ralph .....Farmer, Sentinel Butte, N. D.
Marquis, Sidney, Electrical Engineer .....
.....With Briggs and Stratton Co., Milwaukee, Wis.
Matheny, Chester, Elec. Eng. .....
.....With Briggs and Stratton Co., Milwaukee, Wis.
Odland, John .....Farmer, Sentinel Butte, N. D.
Palm, Ellen (Olson) .....Norden
Peirce, Ruth .....Music Teacher, Brookings
Phillips, Geo. .....Y. M. C. A. Sec., S. D. S. C., Brookings
Sarvis, Johnson .....Special Agent, Dept. of Agr., Mandan, N. D.
Sperb, Frank .....Civil Engr., Woodburn, Ore.
Swering, Joe, Electrical Engineer .....
.....With Westinghouse Mfg. Co., Wilkinsburg, Pa.
Treacy, Timonthy, Catholic Priest .....
.....487 Mich. Ave., N. E., Washington, D. C.
Vernlund, Carl, Physician and Surgeon .....
.....Hartford Hospital, 211 Church St., Hartford, Conn.
White, Orland, Botanist, Brooklyn Bot. Gardens, Brooklyn, N. Y.
Wickre, Jacob .....Farmer, Langford
Wright, Mary (Dutcher) .....706 N. 12th St., Corvallis, Ore.

PHARMACY GRADUATES

Abbott, Guy S. .....Druggist, Yale
Buck, Ervin .....Druggist, Wessington Springs
Crosby, LeRoy .....Pharmacist, Hitchcock
Dickey, James .....Druggist, Iroquois
Hage, Christian .....Druggist, Toronto
Wilson, Frank M. .....Druggist, Ronan, Mont.
Youngberg, Guy E. ....P. G. Student, Harvard Univ., Boston, Mass.

Class of 1910

MASTER OF SCIENCE

Alton, Benjamin H., Physician and Surgeon .....

.....Mass. Gen. Hosp., Boston, Mass.
Dutcher, R. Adams, Prof. of Agr. Chem., Ore. Agr. College ....
.....706 N. 12th St., Corvallis, Ore.
Youngberg, Guy E. ....P. G. Student, Harvard Univ., Boston, Mass.

MECHANICAL ENGINEERING

Hofstetter, George, Inst. in Manual Training .....
.....Govt. School, Box 487, Manila, P. I.

BACHELOR OF SCIENCE

Atkinson, Fay .....Farmer, Coal Harbor, N. D.
Barber, Floyd, Civil Engineer .....
.....2006 33rd St., Care Co. Engineer, Everett, Wash.
Biggar, Howard H. .....U. S. Dept. of Agr., Washington, D. C.
Crothers, Harold, Inst. in Elec. Eng., U. of Wisconsin .....
.....1809 Ray St., Madison, Wis.
Crothers, Ralph .....Farmer, Badger
Fickle, Walter .....Died Jan. 26, 1911, at Blunt
Fridley, Ray .....Manager Fridley's Garage, Brookings
Grotta, Edwin .....Implement Dealer, Esmond
Johnson, Charles .....Hardware Merchant, Hetland
Johnson, Milla (Anderson) .....New England, N. D.
Kartrudge, Inga .....Teacher, Hardwick, Minn.
Kelly, T. B. .....Prof. of Music, State Normal, Fremont, Neb.
Lothrop, Elmer .....Electrical Engineer, Redfield
Lloyd, Robert .....Elec. Contr., Santa Ana, Cal.
Matheny, Allie (Wooledge) .....Minot, N. D.
Matheny, Fred ....Civil Eng., 2004 L. C. Smith Bldg., Seattle, Wash.
Morrison, Joseph .....Agr. Expert, Sub Station, Highmore
Nagel, Herman, Research Specialist, with Douglas Starch Co. ..
.....Cedar Rapids, Ia.
Ort, A. A., Civil Engineer .....
.....Care Chief Eng., Miami Conservancy District, Dayton, O.
Palm, Andrew .....County Agricultural Agent, Watertown
Sexauer, Elmer .....Grain, Brookings
Sheldon, Nettie (Atkinson) .....Coal Harbor, N. D.
Wahl, Walker W. .....Farmer, Cartersville, Mont.
Welch, Cecile (Sexauer) .....Brookings
Wohlheter, Verne .....Attorney, Sisseton
Yocom, Frank .....Inst. in Manual Training, Holtville, Cal.

PHARMACY GRADUATES

Brown, Geo. B. .....Farmer, Clark
Goldthrop, George .....Druggist, Conde
Morrison, Joseph .....Agricultural Expert, Sub Station, Highmore
Williams, Arthur .....Pharmacist, Sturgis

Class of 1911

MASTER OF SCIENCE

Sarvis, Johnson .....Special Agent, Dept. of Agr., Mandan, N. D.
White, Orland, Botanist, Brooklyn Bot. Gardens, Brooklyn, N. Y.

BACHELOR OF SCIENCE

Balmat, John .....Civil Engineer, Yankton, S. D.
Catlett, Marguerite .....Brookings
Cooledge, Leslie .....Asst. Prof. Bacteriology, East Lansing, Mich.
Cottingham, Jay, Lumberman .....
.....With Fullerton Lumber Co., Sioux City, Iowa
Erwin, Ruth (Bibby) .....State College, Pa.
Finley, Vollmar .....Inst. in Agr., Redwood Falls, Minn.
Fridley, Bess (Fromme) .....Blacksburg, Va.
Fridley, Richard .....Died Aug. 23, 1912, at Lake Benton, Minn.
Fromme, Fred, Prof. of Bot., Va. Inst. of Technology, Blacksburg
Gropengieser, Fred .....Asst. Bank Cashier, Onida
Haas, Carrier (Quinn) .....Arlington
Hallen, Harold .....Electrical Engineer, Ord, Neb.
Huntemer, Percy .....Inst. in Agr., Melrose, Minn.
Jarman, Mabelle .....Brookings
Johnson, Clifford .....Died September, 1912, at Huron
Knutson, Geneva (Flittie) .....Brookings
Ladd, Amy .....Physical Director, 1007 Grant St., Carthage, Mo.
Mathewson, Lynn, Mech. Engr., 6130 Kenwood Ave., Chicago, Ill.
McMillan, Orville .....Prin. of Schools, Alpena
Meharg, Max .....Inst. Man. Training, Park City, Utah
Mitchell, Harry, Elec, Engr., 2933 Girard Ave., S., Minneapolis, Minn.
Odland, Ole M. .....Farmer, Hurley
Peterson, Helen .....Brookings
Plocker, Florence (Shelden) .....Perdue, Sask., Canada
Quinn, Roy .....Inst. in Agr., Fairfax, Minn.
Randall, Frank .....Mech. Engr., Aberdeen
Sherwin, Muriel (Stoll) .....Brookings
Starring, Cecil, Asst. in Hort., Mont. Agr. College, Bozeman, Mont.
Swenehart, John .....Co. Agricultural Agent, Crandon, Wis.
Throop, Lotta (Odland) .....Sentinel Butte, N. D.
Tinker, Mabel .....Brookings
Wilson, R. O. .....Registrar, Mont. State Col., Bozeman, Mont.

PHARMACY GRADUATES

Fellows, Carl .....Druggist, White Lake
Martin, Earl S. .....Merchant, Oldham
Serles, Earl .....Prof. of Pharmacy, S. D. S. C.
Shea, Henry ...Asst. in Chemistry, Montana State College, Bozeman
Vis, Heyme .....Druggist, Midland

Class of 1912

BACHELOR OF SCIENCE

Atwood, Geo. B. .....Veterinarian, Arlington
Bibby, Irwin J., Asst. in Dairying, Penn. State Col., State College
Bisbey, R., Asst. in Bontany, Univ. of Minn., Minneapolis, Minn.
Dachtler, Fred J. .....Farmer, Sturgis
Edson, Ray W. .....With Gen. Elec. Co., 24 Baker St., Lynn, Mass.
Erdmann, Henry E., P. G. Student, U. of Wisconsin .....
.....619 W. Johnson St., Madison, Wis.
Granger, Paul F., Civ. Eng., 1444 W. 22nd St., Los Angeles, Cal.
Hathaway, Floyd C., Instructor in Agr. .....
.....Man. Training School, Ellendale, N. D.
Jensen, Russell C. .....Ice Manufacturer, Watertown
Kremer, Henrietta (Furnstahl) .....Ajo, Ariz.
Larson, John E., Field Agronomist, Ore. Agr. Col. .....
.....135 25th St., W., Corvallis, Ore.
Marchant, Guy R. ....Elec. Engr., 323 W. 23rd St., New York City
Oakland, Irwin S., Student Northwestern School of Dentistry ..
..... Chicago, Ill.
Peck, Arthur R. .....Elec. Eng., Schenectady, N. Y.
Pence, Clay, Elec. Salesman, 313 Penwood Ave., Wilkinsburg, Pa.
Reeve, John E., Elec. Engr., 16 Campbell Ave., Schenectady, N. Y.
Revell, Grace (Bailey) .....Ames, Ia.
Sauder, Wm. O. .....Forestry, Saguache, Col.
Schaphorst, Ben .....Lawyer, Brookings
Skinner, Lila, Inst. in Home Economics, U. of Ohio, Columbus, O.
Sparks, Henry .....Civil Engineer, Mitchell
Stearns, Arthur J. ....Elec. Engr., 16 Hecla Blk., Edmonton, Alberta
Welker, Verne E. .....Electrical Engineer, Clarion, Ia.

PHARMACY GRADUATES

Bacon, Harry .....Druggist, Edgemont
Christianson, Helen (Quinn) .....Badger
Clark, Robt. W. .....Died in Sioux Falls, March 26, 1916
Farnham, Beatrice .....Druggist, Waubay
Farrar, Vere .....Pharmacist, Langford
Grant, Clyde .....Pharmacist, Iowa City, Ia.
Holstrom, Will .....Pharmacist, Huron
Holleman, William .....Pharmacist, Springfield
Leavitt, Ethel .....Pharmacist, Milbank
Morton, Richard .....Pharmacist, New Effington
Serles, Raymond .....Pharmacist, Salem

Class of 1913

BACHELOR OF SCIENCE

Basgen, Fred .....Structural Engineer, Goodwin
Binnewies, Edward R. .....Asso. Prof. of Chem., S. D. S. C.

Brigham, Ruth .....Brinklow, Md.
Cole, Glenn H. .....Farmer, Gary, S. D.
Dunn, Everett W. .....Civil Engineering, Eldora, Iowa
Engstrom, Carl .....Electrical Engineer, Hutchinson, Minn.
Faulkner, Hugh .....Farmer, Burkmere
Fowlds, Matthew .....Asst. in Agronomy, S. D. S. C.
Freiberg, George, Research Fellow, Mo. Bot. Gardens, St. Louis, Mo.
Greenly, Maurice G., Sci. Teacher, 1036 Green St., Honolulu, Hawaii
Gurslee, Chris. B., Inst. in Northwestern School of Dentistry ..
.....1725 Wilson Ave., Chicago, Ill.
Heiser, Agnes K. (Yunker) .....Hecla
Huyck, Nina B., Instr. in Dom. Sci., State Nor. School, Springfield
King, Stanley .....Civil Engineer, Watertown
Kremer, Ralph C. .....Ajo, Ariz.
Landweer, Earl .....Electrical Engineer, Hartford
McHugh, Frank James .....Farmer, West Point, Mass.
Matheny, Hazel A. .....Conde
Morrow, Strayer (Sauder) .....Saguache, Colo.
Morrison, Guy E. .....Agr. Expert, Brookings
Nilsson, Anna C. .....Teacher, Henning, Minn.
Nord, Roy A. .....Lawyer, Huron
Olson, Thos. G. .....Elec. Eng., Canby, Minn.
Pier, Clarence L. .....Ice Manufacturer, Mitchell, S. D.
Rilling, Harry M. .....Asst. in Agronomy, S. D. S. C.
Sanderson, Harry M. .....Asst. in Agronomy, S. D. S. C.
Shanley, Clarence .....Deputy Dairy Inspector, Brookings
Shea, Henry M., Chemist, Montana State College, Bozeman, Mont.
Shepard, Helen (Atwood) .....Arlington
Sloan, Edith .....Instructor Home Economics, Brookings
Somers, Grace .....Instructor Home Economics, Prescott, Ariz.
Sponholz, Lydia (Britzius) .....Hayfield, Minn.
Templeton, Mabel (Johnson) .....Hetland
Wood, Ruth A. .....Inst. Home Economics, Caldwell, Idaho

PHARMACY GRADUATES

Eidsmoe, Clark T. .....Co. Treasurer, Sisseton
Johnson, Arthur F. .....Pharmacist, Springfield, Minn.
Lawler, Frank M., Pharmacist, with L. T. Dunning Co., Sioux Falls
Null, Ralph L. .....Pharmacist, Miller
Simpson, Wm. R. .....Pharmacist, Flandreau
Soule, Roy H. .....Druggist, Farmer
Tommeraasen, Corne .....Pharmacist, Madison
Wornson, Walter A. .....Medical Student, Milwaukee, Wis.

Class of 1914

BACHELOR OF SCIENCE

Armstrong, Lillian, Instructor in Home Economics, Elmore, Minn.

Armstrong, Inez, Instructor in Home Economics .....
.....Washington Agr. College, Pullman, Wn.
Ausman, Leslie V. .....County Agr. Agent, Clark
Britzius, Arno .....Inst. in Agriculture, Hayfield, Minn.
Bushey, Alfred, P. G. Student, Purdue Univ. .....
.....210 Waldron St., Lafayette, Ind.
Casley, Lulu .....High School Instructor, Bryant
Chappell, Vincent ....Asst. in Dairying, Iowa State Col., Ames, Iowa
Clifford, Perry .....Farmer, Cresbard
Dulitz, Helen .....Webster, S. D.
Elliott, Robert .....Registrar, S. D. S. C.
Gilbertson, Geo. .....Asst. in Entomology, S. D. S. C.
Gotthold, Roy .....Manual Training, Miller, S. D.
Grinols, Hazel (Palm) .....Watertown
Halladay, Clinton, Civil Engineer .....
.....With Rock Island Ry., 6930 Eggleston Ave., Chicago, Ill.
Hartgering, Frances .....Inst. Dom. Sci., Black Duck, Minn.
Hegdahl, Paul .....Farmer, Bruce, Mont.
Heck, Emil .....Civ. Eng., Oregon Agr. Col., Corvallis
Hofstetter, Clarence .....Inst. Manual Training, St. Maries, Idaho
Knutson, Charlie O. .....Electrician, Canby, Minn.
Legler, Edward V., Elec. Eng., 306 Campbell Ave., Schenectady, N. Y.
Luebke, Esther .....Inst. Domestic Science, Stevensville, Mont.
Persun, Francis J. E. .....Inst. in Agr., Atwater, Minn.
Sexauer, Laura .....Teacher, Brookings
Shepard, Albert D. .....Chemist, Union Powder Co., Tarlin, N. J.
Slightam, Kate .....Inst. in Dom. Science, Monroe, Wis.
Sherwood, Reginald .....Asst. in Chemistry, S. D. S. C.
Sloan, Sam .....Farmer, Brookings
Somers, Ruth (Haugen) .....Brookings
Valentine, Vey .....County Agr. Agt., Ft. Pierre
White, Henry D. .....Supt. of Schools, Peever
Wilkins, Scott .....Asst. in Agronomy, Iowa State Col., Ames, Iowa
Wood, Nina (Sloan) .....Brookings
Wills, Ernest V. .....Electrician, 2505 Mich. Ave. S., Chicago, Ill.

PHARMACY GRADUATES

Eng, Julius .....Pharmacist, Flandreau
Kadinger, Lewis .....Pharmacist, Vienna
McDougal, Tyrell .....Student, S. D. S. C.
Nelson, Lewis .....Asst. in Zoology, S. D. S. C.
Ray, Winifred .....Druggist, Aurora
Shaw, Albert J. .....Pharmacist, Miller
Sivertson, Anna .....Druggist, Pierpont

Class of 1915

MASTER OF SCIENCE

Binnewies, Edward .....Asst. Prof. Chem., S. D. S. C.

Shea, Morris Henry .....Chemist, Montana State College, Bozeman
Sherwood, Reginald .....Asst. in Chem., S. D. S. C.
Sloan, Samuel L. .....Farmer, Brookings
Mayland, George .....Farmer, Brookings

BACHELOR OF SCIENCE

Bolland, Jens .....Farmer, Pierpont
Caldwell, Florence (Heck) .....Oregon Agr. Col., Corvallis, Ore.
Caldwell, Lacey .....Inst. in Agr., Park Rapids, Minn.
Clarke, Bruce .....Pharmacist, Pierre
Cooley, Hazel (Keddie) .....Bear Lake, Mich.
Culhane, Alexander .....Asst. State Dairy Inspector, S. D. S. C.
Culhane, James, Elec. Engineer .....
.....With Westinghouse Mfg. Co., Williamsburg, Pa.
Drury, Lillian .....Secretary, Chamberlain
Freeman, John .....Farmer, Rapid City
Gardner, Harry .....Instr. in Agr., State Normal, Spearfish
Gilbert, Gladys (Ortmayer) ..Care Park College, Washington, D. C.
Graham, William B. .....Farmer, Freeport, Minn.
Hale, Ruth .....Instr. in Dom. Sci., Fairchild, Wis.
Iverson, Carrold .....Asst. in Dairying, Iowa State College, Ames
Johnson, Carl J. .....With Briggs and Stratton Co., Milwaukee, Wis.
Jones, A. Patti .....Student, 1728 4th St., S. E., Minneapolis, Minn.
Keck, Dallas .....Instr. in Agr., Red Lake Falls, Minn.
Kremer, Frank .....Law Student, Univ. of Michigan, Ann Arbor
Lanphier, Ira ....Asst. Prof. Civ. Eng., U. of N. Mex., Albuquerque
Lynch, Arthur .....Stockman, State School, Redfield
Nixon, Jessie .....Teacher, St. Paris, Ohio
Nord, Florence .....Art Student, 6047 Ellis Ave., Chicago, Ill.
Pilmer, Miller .....With Des Moines Elec. Co., Des Moines, Ia.
Potter, Ernest C., Theological Student, Moody Bible Inst., Chicago
Serles, Earl R. .....Prof. of Pharmacy, S. D. S. C.
Wornson, Walter .....Medical Student, Milwaukee, Wis.

PHARMACY GRADUATES

Abbott, Walter G. .....Pharmacist, Tyndall
Clark, Bruce E. .....Pharmacist, Pierre
Colliton, Ora A. .....Pharmacist, St. Paul, Minn.
Giannonatti, Elene .....Pharmacist, Ludlow
Haugen, Martin Bernhard .....Pharmacist, Hartford
Little, Guy Almond .....Druggist, Brandt
Loesch, William Patrick .....Druggist, Bruce
Olson, Edward Furness .....Pharmacist, Alcester
Randall, Harry Eugene .....Pharmacist, Arlington
Tolagson, Clarence Ferrold .....Pharmacist, Woonsocket

Class of 1916

MASTER OF SCIENCE

Bolland, Jens L. .....Farmer, Pierpont
Gilbertson, Geo. L. .....Asst. in Entomology, S. D. S. C.
Loomis, Howard .....Asst. in Agronomy, S. D. S. C.
Morrison, Jos. D. .....Agr. Expert, Highmore
Rilling, Harry E. .....Asst. in Agronomy, S. D. S. C.
Sherwood, Reginald .....Asst. in Chemistry, S. D. S. C.

BACHELOR OF SCIENCE

Abbott, Cleveland, Instructor in Dairying .....
.....Tuskegee Institute, Tuskegee, Ala.
Allison, Arthur ....Electrician, With G. E. Co., Schenectady, N. Y.
Anderson, Georgia .....Instr. Home Economics, Rapid City
Austin, Ethel .....Instr. in Home Economics, Faulkton
Avery, Blanche .....Instr. in Home Economics, Elgin, Ill.
Bergeim, Jos. .....Principal High School, Lemmon
Caldwell, Kate .....Instr. Home Economics, Dawson, Minn.
Calkins, Fred, ...Electrician, With G. E. Co., Schenectady, N. Y.
Chapman, Daphne .....Instr. Home Economics, Highmore
Dawes, Adelia .....Instr. English and History, Fulton, S. D.
Dott, Delia .....Instr. Home Economics, Sibley, Iowa
Evers, Clarence .....2nd Lieut., U. S. A., Bigstone, S. D.
Fish, Warren D. .....Mechanical Engineer, Ipswich, S. D.
Fridley, Harry .....Farmer, Brookings
Fryer, Julia .....Instr. Home Economics, Howard
Gold, Ralph .....Electrician, With G. E. Co., Schenectady, N. Y.
Greene, Bernice .....Instr. Home Economics, Falls City, Neb.
Greeves, Bertha .....Instr. Home Economics, Velva, N. D.
Grudem, William, Electrician .....
.....With Westinghouse Mfg. Co., Wilkinsburg, Pa.
Hanten, Matt .....Farmer, Watertown
Heiser, Marie .....Teacher, White
Humphrey, Francis .....Teacher, Carthage
Jerlow, Morris .....Prin. Twp. School, Bath
Johnston, Ralph E. .....County Agr. Agent, Hot Springs
Kennard, Geo. .....Instr. in Agriculture, Arnolds Park, Ia.
Knutson, Robt. .....Instr. in Agr., Bigstone, S. D.
Lanphier, Eva .....Instr. Home Economics, Montevideo, Minn.
Laxson, Leroy .....Farmer, Hoven, S. D.
Lynch, Edw. .....Instr. in Agr., Belle Fourche
Lynch, Ruth .....Instr. in Science, Faulkton
Matson, Mamie .....Instr. Junior College, Evansville, Wis.
Miller, Harold .....Instr. in Zoology, S. D. S. C.
Mills, Erma Davis .....Brookings
Nelson, Lewis E. .....Instr. in Zoology, S. D. S. C.

Peterson, Harold, Electrician .....
.....With Westinghouse Mfg. Co., Wilkinsburg, Pa.
Rishoi, Alfred .....Asst. State Dairy Inspector, Brookings
Rowe, Chas. .....Asst. in Chemistry, S. D. S. C.
Rowe, Nellie .....Instr. Home Economics, Purdue Univ.
Schlatter, Chas. F. .....Prof. of Commercial Science, S. D. S. C.
Sheehan, Bernard F. ....Instr. in Agronomy, Iowa State Col., Ames
Slaatta, Emma .....Instr. Home Economics, Springfield, Minn.
Sloan, Janet .....Instr. in English, Castlewood
Smith, Homer ..Instr. in Pub. Speaking, Cornell Univ, Ithaca, N. Y.
Waltner, Benj. P. .....Farmer, Freeman, S. D.
Warner, Harry .....Instr. in Agronomy, Iowa State Col., Ames
Weber, Geo. .....Co. Agr. Agent, Alexandria
Wing, Lesher, Electrician, With E. Mich. Power Co., Jackson, Mich.

PHARMACY GRADUATES

Anderson, A. Edward .....Student, S. D. S. C.
Burton, Starling .....S. D. N. G., Springfield
Corkhill, Clifford .....S. D. N. G., Hurley
Hemingway, Robt. W. .....Student, S. D. S. C.
Langdon, Hazel (Nelson) .....Student, S. D. S. C.
Lenocker, Paul .....Pharmacist, Brookings
Peterson, Edw. .....Pharmacist, With Spotts & Post, LeMars, Iowa
Rasmussen, Ethel .....Pharmacist, Watertown
Tabor, Floyd .....Pharmacist, Garretson, S. D.

Student List

1916-1917

GRADUATE STUDENTS

Lynch, Arthur	Agriculture	Brookings
Nelson, Lewis	Education	Brookings
Rowe, Charles	Chemistry	Sioux Falls
Sanderson, Harry	Agronomy	Brookings
Serles, Earl R.	Chemistry	Salem

COLLEGIATE STUDENTS

SENIORS

Ainsworth, Ernest	Agr.	Brookings
Anderson, Eldon	Agr.	Pierre
Anderson, Leon	Agr.	Rapid City
Bennett, Lyle L.	G. S.	Canton
Browning, Lenore	G. S.	Brookings
Chappell, Mabel	H. E.	Brookings
Cunningham, Ray	G. S.	Conde
Cook, Orlan	E. E.	Clear Lake
Dakin, Norman	Agr.	Brookings
DeGreef, Charles	G S.	Big Stone
Doughty, Walter	Agr.	White
Evans, Roy	C. E.	Brookings
Glennon, Daniel C.	Agr.	Huron
Gregory, Eva	H. E.	Alexandria
Heiser, Elizabeth	H. E.	White
Hill, Joe	Agr.	Mitchell
Holliday, Faye	H. E.	Brookings
Holliday, Lloyd	Agr.	Brookings
Jennings, Hollace	Agr.	Estelline
Johnson, Ralph	Agr.	Hetland
Jones, Horace	Agr.	Mitchell
Karlstad, Charles H.	Agr.	Dempster
Keating, Pearl	H. E.	DeSmet
Kopperud, Harmon	Agr.	Lake Preston
Lanphier, Harriett	H. E	Brookings
Lee, Vera	H. E	Brookings
Lothrop, Orlin	E. E.	Academy
McCoy, Dell	C. E.	Miller
Malone, Robert	C. E.	Huron
Miller, Henry J.	E. E.	Hudson

Mills, Omer	Agr.	Wall
Nelson, Mrs. Hazel	Py.	Brookings
Nickerson, Mary	Py.	Brookings
Nord, Daisy	H. E.	Brookings
Petersen, Axel	Agr.	Sioux Falls
Rudd, Charles	E. E.	Orient
Severson, Florence	H. E.	Brookings
Shaw, Happy	H. E.	Madison
Sherwood, Aubrey	Agr.	DeSmet
Skinner, Cecil	Agr.	Brookings
Sloan, Lyle	E. E.	Alexandria
Smith, Harry	C. E.	Miller
Stevens, Leo	C. E.	Sioux City, Ia.
Stoddart, Mattie	H. E.	Brookings
Styer, Clarence	C. E.	Huron
Swenehart, Millie	H. E.	Brookings
Swift, Eugene	Agr.	Brookings
Voss, Edward	G. S.	Garvin, Minn.
Wagner, Colman	Agr.	Selby
Waltner, Adolph	Agr.	Freeman
Waltner, Caroline	H. E.	Freeman
Wattson, Donald	Agr.	Chamberlain
Westgate, Louis	Agr.	Adrian, Mich.
Winright, George	Agr.	Alexandria
Ziegler, Arlene	H. E.	Brookings

JUNIORS

Ahlers, Naomi	G. S.	Webster
Anderson, Adlai	Agr.	Mitchell
Aney, Roy	Agr.	Peever
Bacon, Grace (Lynch)	H. E.	Brookings
Beals, Edna	H. E.	Brookings
Berglind, Axel	Agr.	Brookings
Blakely, Clifford	G. S.	Brookings
Boswell, Mildred	H. E.	Castlewood
Bulger, Jacob	Agr.	White
Bunday, Ray	G. S.	Brookings
Cable, Franzella	H. E.	Hudson
Caldwell, Jessie	H. E.	Brookings
Clark, Esther A.	H. E.	Faulkton
Collinge, Vernie	Agr.	Sturgis
Coughlin, Thomas	Agr.	Carthage
Dewing, Sara	H. E.	Brookings
Dibble, Robert	G. S.	Beresford
Dokter, Garrett	Agr.	Andover
Drury, Joseph	Agr.	Chamberlain
Emerson, William	E. E.	Castlewood
Evans, Margaret	H. E.	Brookings

Frease, Hazel	H. E.	Brookings
Frease, Kathryn	H. E.	Brookings
Gaylord, Claire	G. S.	Brookings
Giannonatti, Elene	Py.	Brookings
Gilbert, Charles	Agr.	Clark
Goddard, Bertin	G. S.	Hot Springs
Greeves, Ida	H. E.	Miller
Gretschmann, Anna F.	H. E.	Springfield
Grinols, Mavis	H. E.	Brookings
Grinols, Violet	G. S.	Brookings
Hanson, Hazel	G. S.	Brookings
Hemingway, Robert	Py.	Mattoon, Wis.
Hewett, Howard	Agr.	Arlington
Hood, Kenneth	Agr.	Groton
Hoon, Glenn	Agr.	Kadoka
Hoover, Harold	Agr.	Brookings
Hough, Orilla (Sherwood)	H. E.	Brookings
Hutchinson, Ethel	H. E.	Webster
Hyde, Hara	G. S.	Brookings
Johnson, Ira S.	Agr.	Miller
Laird, Walter S.	E. E.	Salem
Lasell, Leola	G. S.	Waubay
Lawlor, Joe	C. E.	Miller
Layson, S. V.	Agr.	Millersburg, Ky.
Lister, Paul B.	Agr.	Bixby
McDougall, Tyrell	Py.	Britton
McFadden, Edgar	Agr.	Webster
Mathews, Hubert	G. S.	Brookings
Mathieson, Homer	Agr.	Watertown
Michaels, Ernest	C. E.	Watertown
Miller, Arthur	Agr.	Madison
Mills, Oscar	Agr.	Wall
Pickett, H. Hubbie	E. E.	Brookings
Pier, Lenora	H. E.	Woonsocket
Randall, Elizabeth	H. E.	Brookings
Reid, Phyllis	H. E.	Castlewood
Revell, James	Agr.	Brookings
Riis, Jens	Agr.	Brookings
Rilling, Elsie	H. E.	Brookings
Simons, Stella	H. E.	Castlewood
Smith, Chester	G. S.	Egan
Steensland, Theodore	Agr.	Beresford
Stevens, Florence	H. E.	Redfield
Thelin, Guy	Agr.	Sioux Falls
Tompkins, Arthur	Agr.	Brookings
Urton, Raymond	Agr.	Fulton
Ustrud, Ida	H. E.	Watertown

Webb, Grace	G. S.	Arlington
Woodruff, Lewis	Agr.	Wessington
Woodruff, Victor	G. S.	Miller

SOPHOMORES

Alberty, Joseph	Agr.	Parker
Aldrich, Dorothy	G. S.	Big Stone
Allen, Edna	H. E.	DeSmet
Anderson, Leslie	G. S.	Brookings
Andrews, Daisy	H. E.	Highmore
Atkinson, Ray	G. S.	Brookings
Austin, Guy	Agr.	Brookings
Ayer, Horace M.	G. S.	Vermillion
Bacon, Lula Mae	H. E.	Gettysburg
Bakke, Benjamin	E. E.	Howard
Bastian, Elias D.	Agr.	Frankfort
Bergeim, Frank	G. S.	Brookings
Bergstresser, Grant G.	E. E.	Wentworth
Bissell, William E.	Py.	Irene
Boehmer, J. Willis	Agr.	Fulton
Brenner, Ivan	Agr.	Canton
Browne, Barnard	Agr.	Mitchell
Brown, Cecil	Agr.	Brookings
Browning, Albert	G. S.	Brookings
Bryant, Gladys	H. E.	Andover
Bucholz, Rudolph	Agr.	Brookings
Cannon, Kittie	H. E.	Woonsocket
Carlisle, Frances	H. E.	Brookings
Carroll, William C.	Agr.	Huron
Cole, Lynn	G. S.	Brookings
Coplan, Max	Agr.	Watertown
Cordiner, Waneta	H. E.	Clear Lake
Crawford, Dell	Py.	Rochester, Minn.
Crofoot, Mentha	G. S.	Webster
Crofoot, Vanita	H. E.	Webster
Dahl, Clarence	Py.	Langford
Daniels, Blair	H. E.	Ipswich
Danielson, Percy	Agr.	Hendricks, Minn.
Dawson, Thomas	Agr.	Hawarden, Ia.
Dibble, Paul G.	G. S.	Beresford
Dokter, John	Agr.	Andover
Dunn, John F.	Agr.	Ann Arbor, Mich.
Erp, Earl	Agr.	Canton
Faulkner, Drew	M. E.	Burkmere
Fenn, Leonard	Agr.	Brookings
Ford, Lucile	Py.	Davis
Gilbert, Paul	Agr.	Rochester, Minn.
Gloeckler, William	G. S.	Menno

Gooch, Wilbur	G. S.	Brookings
Green, Carroll	G. S.	Brookings
Halvorson, Harry	Agr.	Brookings
Healy, Roger	Agr.	Langford
Holm, Olga	G. S.	Webster
Hoyt, Lloyd	Py.	DeSmet
Huchendorf, Clara	H. E.	Brookings
Hurlbert, Roy	Agr.	Raymond
Hutchinson, Florice	H. E.	Webster
Hutton, Lynn	Agr.	Egan
Irish, Edith	H. E.	Brookings
Jackson, Clark	E. E.	Dell Rapids
Johnson, Gustaf	Agr.	Lake Norden
Kennedy, Benjamin	G. S.	Canton
Kirk, Louise	H. E.	Springfield
Langdon, Floyd	Agr.	Clear Lake
Larsen, Ora	H. E.	Brookings
LeCocq, Marion	Agr.	Harrison
Linn, Lela	Music	Brookings
McDougall, Portia	G. S.	Britton
Marshman, Clinton	C. E.	Brookings
Mills, Fern	H. E.	Wall
Mitchell, Arthur	G. S.	Brookings
Morton, Joy	H. E.	Brookings
Nelson, Edmund	G. S.	Estelline
Nelson, Ineta	H. E	Dell Rapids
Nielson, Arthur	Py.	Rapid City
Olson, Florence	H. E.	Webster
Overturf, William	Py.	Doland
Peterson, Orvis	Agr.	Brookings
Peterson, Ruth	G. S.	Brookings
Potter Earl	E. E.	Carthage
Randall, Pearl	H. E.	Brookings
Reedy, Ernest	Agr.	Beresford
Robbins, Walter	Agr.	Carthage
Rottluff, Karl	Py.	Sioux Falls
Sanders, B. Harry	Py.	Garretson
Schad, Ernest	Py.	Appleton, Minn.
Scott, Millard	Sec.	Artesian
Seubert, Wilbur	Agr.	Brookings
Shaw, Inez	H. E.	Estelline
Shepard, James	G. S.	Brookings
Shinn, Elvin	E. E.	Carthage
Skiff, Hazel	H. E.	Brookings
Somers, Esther	H. E.	Brookings
Spurling, Dorothy	H. E.	Brookings
Steveson, J. Lee	Agr.	Vermillion

Sunde, Conrad J.	Agr.	Sisseton
Swenehart, Delmer	G. S.	Brookings
Thomas, Loyall	Agr.	Ames, Iowa
Thompson, Albert	Py.	Brookings
Tilley, Martha	G. S.	Spencer
Valentine, George	Agr.	White
Van Dervoort, Harvey	Agr.	Milbank
Walker, Jay F.	E. E.	Carthage
Walpole, Robert	Py.	Springfield
Walseth, Edwin T.	G. S.	Clear Lake
White, Helen	G. S.	Woonsocket
Wiles, Glenn	E. E.	Trent
Williams, Clayton	E. E.	Lake Preston
Wilson, Bliss	Py.	Frankfort
Wood, Laura	H. E.	Brookings
Wood, Milton	Agr.	Brookings
Yeamans, Bessie	H. E.	Vienna

FRESHMEN

Allison, Andrew	E. E.	Huron
Anderson, Alvia	H. E.	Brookings
Andrews, Walter	G. S.	DeSmet
Arneson, Anna	G. S.	Garretson
Atwater, Effie	H. E.	Redfield
Austin, Elbert	M. E.	Brookings
Bacon, Mabel	H. E.	Brookings
Baker, Frances	H. E.	Brookings
Bartlett, Elsie	Sec.	Brookings
Basart, Victor	Agr.	DeSmet
Bickel, Eva	H. E.	Watertown
Biggar, George	Agr.	Brookings
Bird, Charles L.	Py.	Doland
Bottum, George	G. S.	Tulare
Boyden, Lewis	Agr.	Academy
Brown, Leslie	Agr.	Walker, Mo.
Caldwell, Genevieve	H. E.	Brookings
Caldwell, Lyman	Agr.	Brookings
Campbell, Horace	G. S.	Brookings
Carey, Herbert	Py.	Bryant
Carlson, William B.	Sec.	Chamberlain
Chappell, Genevieve	H. E.	Brookings
Chase, Elizabeth	H. E.	Brookings
Chenoweth, Grace	H. E.	Brookings
Clarke, Richard	Py.	Northville
Cole, Olive	Music	Brookings
Colfix, Marie P.	H. E.	Fulton
Conklin, Lloyd	M. E.	Yankton

Cornwell, Floyd M.	Py.	Salem
Crutchett, Ralph	M. E.	Armour
Culhane, Charles	Agr.	Brookings
Curtis, Gertrude	H. E.	Lead
Dalthorp, Charles	G. S.	Volga
Danielson, Sidney	Agr.	Hendricks, Minn.
Day, Helen	H. E.	Clark
Doolittle, Edith	H. E.	Ipswich
Ekse, Ingvald	M. E.	Hendricks, Minn.
Engstrom, Edward	Agr.	Redfield
Evans, Mae	Music	Garden City
Fairchild, Harry N.	Py.	Bryant
Faulkner, James	C. E.	Burkmere
Fenner, Walter	Agr.	Milbank
Flittie, Agnes	H. E.	Brookings
Frease, Helen	H. E.	Brookings
Fryer, Florence	G. S.	Doland
Gardner, Richard	Agr.	Sioux Falls
Gilkerson, David	Agr.	Armour
Graves, Charles	Agr.	Ashton
Haahr, Erwin H.	E. E.	Sioux Falls
Hansen, Eva	H. E.	Brookings
Hansen, Philip	Agr.	Brookings
Harris, Dean	C. E.	Groton
Hartung, Ralph	Agr.	McLaughlin
Hawley, Errol R.	Agr.	Sioux Falls
Haynes, A. L.	Agr.	Scotland
Haynes, Mrs. A. L.	H. E.	Scotland
Hemmer, Matt	G. S.	Aurora
Hermanson, Peter	G. S.	Tyler, Minn.
Hubbard, J. Fay	E. E.	Groton
Huchendorf, Ina	H. E.	Brookings
Hughes, Dudley A.	Py.	Plankinton
Huntimer, Marie	H. E.	Colton
Huyck, Esther Mae	G. S.	Gettysburg
Irish, Margaret	G. S.	St. Louis, Mo.
Jerde, Delbert	M. E.	Brookings
Johnson, James	C. E.	Pierpont
Johnson, Oreat	G. S.	Brookings
Jones, Mary	G. S.	Brookings
Keck, Myrtle	H. E.	Brookings
Keegan, Elizabeth	H. E.	Watertown
Kidman, Bert	Agr.	Vienna
Lanphier, Grace	H. E.	Brookings
Lehner, Mae	Sec.	Brookings
Lien, Ruby	H. E.	Brookings
Lindley, Robert T.	G. S.	Bonesteel

Long, Helen	H. E.	Webster
Lorshbough, Mabel	H. E.	Clark
McMillan, Lloyd	E. E.	Conde
McNamara, William	Py.	Hazel
Masters, George E.	G. S	Spencer
Minier, Earl	G. S.	Brookings
Montgomery, Vera	H E.	Fulton
Moon, Ralph	M. E.	Yankton
Moore, Maurine	Music	Woonsocket
Morrow, Madge	H. E.	Brookings
Munro, Carol	H. E.	Wilmot
Nesseth, Minda	G. S.	Menomonie, Wis.
Noonan, Genevieve	G. S.	Frankfort
Norman, Margaret	Music	Windom, Minn.
Olson, Angie	H. E.	Brookings
Olson, Clarence	Agr.	Brookings
Olson, Lawrence	Agr.	Brookings
Onstine, Everett	Agr.	Flandreau
Peck, Clifford	Agr.	Hazel
Peddicord, Susie	H. E.	Brookings
Pittenger, William	Py.	Aurora
Pope, Clarence C.	Agr.	Miles City, Mont.
RohrBach, Lulu Grace	H. E	Clark
Roos, John	Py.	Tulare
Sacre, Carl	Agr.	Interior
Safford, Harold	Agr.	Aberdeen
Schultz, Myrtle	G. S.	Brookings
Sheldon, Rachel	H. E.	Brookings
Sloan, Grace	H. E.	Brookings
Smith, Carleton	Agr.	Storm Lake, Ia.
Smith, Clarence	Agr.	Henry
Smith, Harold	Agr.	Spearfish
Solberg, Harry	M. E.	Brookings
Staley, James	Py.	Clear Lake
Stark, Elsie	H. E.	Unityville
Street, Thomas	Agr.	Albee
Swab, Grace	H. E.	St. Lawrence
Swift, Cecile	H. E.	Brookings
Tarbell, Sarah	H. E.	Watertown
Tiahrt, Jacobina	H. E.	Dolton
Tompkins, Blanche	H. E.	Brookings
Trenner, Ephraim	Agr.	Cash
Troyer, John A.	Agr.	Lennox
Trumm, Archie	Py.	Hayti
Turner, Verne	Py.	Brookings
Turner, Virgil	G. S.	Brookings
Underwood, Paul	Agr.	Willow Lakes

Vollmer, Louis W.	E. E.	Brentford
Walseth, Russell	Agr.	Clear Lake
Walton, Idella	H. E.	Castlewood
Warner, Fay	Agr.	Clear Lake
Waters, Harley	E. E.	Wentworth
White, Clarence	Agr.	Clark
Whitmus, Walter	G. S.	Brookings
Williamson, Irving M.	G. S.	Watertown
Wilson, Wayne	E. E.	Doland
Wix, Margaret	H. E.	Brookings
Wolber, Oscar	G. S.	Brookings

SPECIALS

Blakely, Mrs. C. H.	Art	Brookings
Bober, Samuel	Agr.	Newell
Clinesmith, Abbie	H. E.	Sioux Falls
Downs, Myra	G. S.	Brookings
Gilbertson, Gurina	Art	Brookings
Gilbertson, Mary	Art	Brookings
Layson, Mrs. Nellie	Music	Brookings
Lindley, John	M. E.	Bonesteel
Nickerson, Ernest	G. S.	Brookings
Titmarsh, Ruth	G. S.	Denver, Colo.

PREPARATORY STUDENTS

FOURTH YEAR

Beals Daniel	Brookings
Bierman, Chris	Mansfield
Bjerke, Elmer	Andover
Burleigh, Ruby	Estelline
Doner, David	Brookings
Eidam, Marshall	Forest City
Enke, Lou	Verdi, Minn.
Hansen, Ross P.	Brookings
Hast, Mary	Bruce
Keck, Marvin	Brookings
Knuth, Coral	Estelline
Lockwood, Howard	Chamberlain
Loken, Emma	Faulkton
McKillop, Frank	Canistota
McNerney, Leo	Huron
Nord, Alfred	Milbank
Plagens, Matie	Garden City
Pollard, Mabel V.	Estelline
Spaulding, Anna	Flandreau
Steele, Nellie	White Rock
Wiley, Mary	Highmore

Wilson, Edith ..... Brookings
Wilson, Madge ..... Brookings

THIRD YEAR

Case, Larue ..... Watertown
Hollenbeck, Henry ..... Glenham
Houghton, Westina ..... Brookings
Kopland, David ..... Brookings
Loken, Emma ..... Faulkton
Mallery, Norris ..... Redfield
Merriman, Grace ..... Carpenter
Miller, Mary (Odland) ..... Brookings
Peterson, Mildred ..... Firesteel
Pope, Elmer ..... Glendive, Mont.
Porter, Paul ..... Onida
Rexford, Belva ..... Aurora
Rothschild, Donald ..... Madison
Sanders, Cecilia ..... Brookings
Sculley, Jesse ..... West Frankfort, Ill.
Weaver, Frank ..... Vera
Wright, Pearl ..... Aurora

SECOND YEAR

Alger, Edward ..... Custer
Allibone, John A. ..... Centerville
Carson, Donald ..... Bradley
Christofferson, Anna ..... Lake Preston
Enke, Rosa ..... Verdi, Minn.
Forsee, Zeta ..... Brookings
Halverson, Gerhard ..... Brandt
Halverson, Walter ..... Brandt
Harlan, Theron ..... Vera
Hinkle, Lillie ..... Brookings
Houghton, Louis ..... Brookings
Hullinger, Artie ..... Vera
Knudson, Sigurd ..... Carthage
Long, Jessie ..... Webster
Rude, Ida ..... Brookings
Seagreen, Olive ..... Turton
Spilde, Gertie ..... Willow Lakes
Thayer, Minnie ..... Brookings
Vik, Kalmar ..... Dell Rapids
Wik, Victor ..... Millard

FIRST YEAR

Barthelmess, Marie ..... Brookings
Coughlin, Joseph ..... DeSmet

Drange, Ella ..... Decorah, Ia.
Dreyer, Jason ..... Brookings
Flatten, Silas ..... Colman
Forby, Ellis H. ..... Onaka
Hanson, William B. ..... Brookings
Harvey, Vernon ..... Brookings
Heggen, Iva ..... Garretson
Judson, Elizabeth ..... New Underwood
Lawrence, James ..... Yale
Long, Gordon ..... Webster
Lovell, Everett ..... Bryant
Lund, Trygve ..... Bradley
Muller, Robert ..... Avon
Olson, Luella ..... Brookings
Plumb, Olive ..... Brookings
Poole, Floyd ..... Brookings
Poole, John ..... Brookings
Schultz, Elsie ..... Elkton
Shoop, Milo ..... Spencer

MUSIC STUDENTS

Anderson, Thyra	Piano, Voice	Hetland
Aldrich, Dorothy	Piano	Big Stone City
Andrews, Walter	Horn	DeSmet
Baker, Delilah	Voice	Aurora
Basart, Victor	Horn	DeSmet
Bickel, Eva	Piano	Watertown
Bjerke, Elmer	Clarinet	Andover
Beehner, Gertrude	Voice	Verdi, Minn.
Bouzek, Benjamin	Violin	Highmore
Brenner, Ivan	Voice	Canton
Caldwell, Lyman	Horn	Brookings
Cannon, Kittie	Piano	Woonsocket
Carrington, David	Clarinet	Mt. Vernon
Carson, Charlotte	Violin	Bradley
Carson, Lloyd	Trombone	Bradley
Cole, Olive	Voice	Brookings
Colfix, Marie	Voice	Fulton
Cordiner, Waneta	Piano	Clear Lake
Curtis, Gertrude	Piano	Lead
Daker, Mildred	Piano	Houghton
Day, Helen	Piano	Clark
Doolittle, Edith	Piano	Ipswich
Doner, David	Trombone	Brookings
Eldridge, Joe	Voice	Brookings
Erickson, Leon	Flute	Montrose
Evans, Mae	Piano, Voice	Garden City

Fairchild, Harry	Clarinet	Bryant
Fenner, Walter	Horn	Milbank
Fryer, Florence	Flute, Voice	Doland
Gates, Mary	Piano	Brookings
Gilbert, Charles	Saxophone	Clark
Gilkerson, David	Trombone	Armour
Gloeckler, Wm. A.	Violin	Menno
Goddard, Bertin	Voice	Hot Springs
Grindberg, Anna	Piano	Trent
Grindberg, Valdine	Piano	Trent
Halverson, Gerhard	Clarinet	Brandt
Hanson, Leslie	Voice	Bridgewater
Heggen, Iva	Piano	Garretson
Hermanson, Peter	Cornet	Tyler, Minn.
Hewett, Howard	Piano	Arlington
Hiscox, Faye	Piano	Montrose
Houghton, Louis	Violin	Brookings
Houghton, Westina	Piano	Brookings
Howg, Emil T.	Cornet	Sisseton
Huyck, Esther	Pnano, Voice	Gettysburg
Johnson, Henry	Voice	Hurley
Johnson, Hilda	Piano	Sherman
Johnson, Oreat	Piano	Brookings
Johnson, Vera	Piano	Balaton, Minn.
Jones, Mary	Piano	Brookings
Judson, Elizabeth	Piano	New Underwood
Keating, Pearl	Piano	DeSmet
Keck, Myrtle	Voice	Brookings
Kelty, Frank S.	Piano	Plankinton
Kieth, Mark	Trombone	Armour
Knox, Charles B.	Clarinet	Binder
Lanphier, Harriet	Voice	Brookings
Layson, Nellie	Voice, Piano	Brookings
Linn, Lela	Voice, Piano	Brookings
Lund, Agnes	Piano, Violin	Dawson, Minn.
McDougall, Portia	Piano, Voice	Britton
Mahany, Max M.	Piano	Brookings
Miller, Mary (Odland)	Piano	Brookings
Moore, Maurine	Piano, Voice	Woonsocket
Moorhouse, Lorenda	Piano	Watertown
Montgomery, Vera	Voice	Fulton
Morton, Joy	Piano	Brookings
Nelson, Helene	Piano	Tyler, Minn.
Nichols, Elva	Piano	Westbrook
Noonan, Genevieve	Piano, Voice	Frankfort
Norman, Margaret	Piano, Voice	Windom, Minn.
Odland, Lawrence	Voice	Hurley

Paul, Eva	Piano	Doland
Peddicord, Susie	Piano	Brookings
Peterson, Ella	Piano	Viborg
Pier, Lenora	Voice	Woonsocket
Plucker, Anna	Piano	Lennox
Putzke, Lawrence	Violin	Humboldt
Quincey, Ralph	Violin	Sioux Falls
Randall, Pearl	Piano	Brookings
Rebrud, Walter	Trumpet	Ipswich
Rexford, Belva	Voice, Piano	Aurora
Rohrbach, Lulu Grace	Piano	Clark
Rovang, Albert	Cornet	Bryant
Rundell, Howard	Saxophone	Hurley
Schubert, Atlee	Violin	Academy
Seagreen, Olive	Piano	Turton
Seubert, Wilbur	Piano	Brookings
Schad, Ernest	Violin	Appleton, Minn.
Shoop, Milo	Piano, Cornet	Spencer
Skiff, Hazel	Piano	Brookings
Slocum, George A.	Violin	Glenham
Spaulding, Anna	Piano	Flandreau
Spilde, Gertie	Piano	Willow Lakes
Stark, Elsie	Piano	Unityville
Stitt, Lyle	Violin	Hitchcock
Suttinger, Valentine	Piano	Delmont
Swift, Cecile	Voice	Brookings
Thayer, Minnie	Piano	Brookings
Urton, J. Raymond	Saxophone	Fulton
Wiley, Mary	Piano	Highmore
Wilson, Madge	Piano	Brookings
Witzel, Roy	Piano	Brookings
Wix, Margaret	Piano	Brookings
Wright, Pearl	Piano, Voice	Aurora
Wyant, Frank	Voice	Reliance

SCHOOL OF AGRICULTURE

FOURTH YEAR

Anderson, Ida	Tulare
Andreessen, Cornelius	Tea
Bakke, Elmer	Webster
Belk, Vernon	Henry
Bishop, Julius	Montrose
Bjerke, Elmer	Andover
Brown, A. Roy	Yankton
Carley, Robert	Embarrass, Wis.
Crisler, Kenneth	Harrisburg

Corothers, John ..... Clear Lake
Crisman, Leo B. ..... Armour
Doner, David ..... Brookings
Dvorak, Frank ..... Redfield
Frandsen, Josephine ..... Brookings
Halvorson, Alma ..... Kenneth, Minn.
Hawes, Hazel ..... Sherman
Hawes, Belle ..... Sherman
Holmes, Clara ..... Brookings
Janssen, George ..... Castlewood
Knudson, Anna B. ..... DeSmet
McFadden, Joseph ..... Huron
McMahon, Russell ..... Bruce
Moen, Lewis ..... Effington
Moyle, Edwin ..... Westport
Neyhart, Helen ..... Gorman
Nord, Alfred ..... Milbank
Paulson, Joseph ..... Brandt
Peterson, P. D. ..... Virgil
Peterson, William ..... Lily
Rundell, Alta ..... Hurley
Rundell, Howard ..... Hurley
Rundell, Leslie ..... Hurley
Scott, Lester ..... Clark
Sloat, Judd ..... Lowry
Sloat, Ora ..... Lowry
Smith, Joseph ..... Sioux Falls
Sueltz, Arthur ..... Groton
Vearrier, Maude ..... Virgil
Wolverton, Don ..... Doland

THIRD YEAR

Ackley, Bliss ..... Bryant
Andrews, Freeman ..... Lake Andes
Bapp, William E. ..... White Rock
Bierman, George ..... Mansfield
Brown, Carl G. ..... Lucas
Bush, Emmit ..... Colome
Corothers, James ..... Clear Lake
Crisman, Roy ..... Armour
Hanson, Albert ..... Elk Point
Hoogshaugen, William ..... Parker
Jensen, James ..... Erwin
Knox, Charles ..... Einder
Merriman, Arthur ..... Carpenter
Neyhart, Earl ..... Gorman
Peppers, Gale ..... Groton
Petry, Kathryn ..... Hawarden, Ia.

Putzke, Edna ..... Humboldt
Putzke, Lawrence ..... Humboldt
Ravndal, Gerald B. ..... Lead
Robbins, Albert ..... Spencer
Shult, Raymond ..... Doland
Stitt, Carroll ..... Hitchcock
Stitt, Harold ..... Hitchcock
Swenson, Alfred ..... Ethan
Tate, Chester ..... Brookings
Tate, May ..... Brookings
Wolters, Arnold ..... Winfred
Worden, Winnie ..... Brookings

SECOND YEAR

Aldrich, Leta ..... Doland
Anderson, Thyra ..... Hetland
Bailey, Lynn G. ..... Clark
Bereman, Miriam ..... Gary
Bratager, Ernest ..... Sioux Falls
Carlisle, Agnes ..... Lake Benton, Minn.
Carson, Charlotte ..... Bradley
Carson, Lloyd ..... Bradley
Chicoine, Benjamin ..... Jefferson
Christensen, Ada ..... Center Point
Daker, Paul ..... Houghton
Eggen, Peter ..... Sisseton
Exe, Inga ..... Brookings
Fasbender, Benjamin ..... Hendricks, Minn.
Fasbender, Leo ..... Hendricks, Minn.
Fees, Burton ..... Cottonwood
Flynn, Leo ..... Montrose
Hermanson,, Jimmie ..... Sherman
Herried, Ernest ..... Summit
Holland, Willis E. ..... Northville
Houg, Emil T. ..... Sisseton
Johnson, Eugene ..... Brookings
Johnson, Florence ..... Brookings
Kemink, Harry M. ..... Castlewood
Killian, Ward V. ..... Vilas
King, Esther ..... Brookings
Linka, John ..... Tyndall
Metz, Ervin ..... Miranda
Meyer, Chas. A. ..... Cavour
Moorhouse, Lorenda ..... Watertown
Morrison, Charley ..... South Shore
Nichols, Elva A. ..... Westbrook

Odland, Lawrence ..... Hurley
Opdycke, Percy ..... Frederick
Paul, Nina ..... Doland
Paulson, Signus ..... Lily
Pederson, Angetta ..... Gayville
Peterson, Earl ..... Sioux Falls
Peters, Dorothy ..... Granville, Ia.
Piper, Albert ..... Carpenter
Priest, Lloyd ..... Dalzell
Rebrud, Walter ..... Ipswich
Rovang, Isabella ..... Bryant
Runstad, Hiram ..... Mt. Vernon
Schmidt, Fred ..... Alpena
Stegeberg, Earl ..... Woonsocket
Stormo, James ..... Hazel
Strunk, Arthur ..... Irene
Suttinger, Valentine ..... Delmont
Tjaden, Sam ..... Harrisburg
Walker, Harry ..... Tripp
Williamson, Garrett ..... Plankinton
Woodford, George ..... Mansfield
Wright, George ..... Artesian
Wudel, Emanuel ..... Parkston

FIRST YEAR

Aldrich, Merton ..... Big Stone City
Allison, Lucy ..... Volga
Apland, Ellsworth ..... Oldham
Bailey, Hugh L. ..... Keldron
Beatty, Richard ..... Elrod
Bentley, Rachel ..... Bryant
Bevington, Herbert ..... Highmore
Bouzek, Ben M. ..... Highmore
Boyden, Louis ..... Academy
Breachel, John ..... Mound City
Brown, Eldon ..... Bradley
Beehner, Gertrude ..... Verdi, Minn.
Buller, Henry W. ..... Parker
Burgess, Mrs. Loyse ..... Brookings
Burgi, Carl ..... Yankton
Butterfield, Warren E. ..... Parker
Buus, Jens ..... Wagner
Caldwell, Charles W. ..... Wolsey
Chrisler, Claude ..... Harrisburg
Christensen, Bert ..... Viborg
Christensen, Marie ..... Viborg
Clinesmith, Abbie ..... Sioux Falls
Cook, Donald ..... Plankinton

Crane, Lloyd ..... Ramona
Crisman, Fay M. ..... Armour
Crouch, John W. ..... Tracy, Minn.
Crowell, Alfred ..... Brookings
Daker, Mildred L. ..... Houghton
Dana, Charles M. ..... Armour
De Rue, Ida ..... Sherman
De Witte, Ellsworth ..... Holabird
Dybdahl, Julian ..... Brookings
Dybdahl, Lillian ..... Brookings
Erickson, Leon ..... Montrose
Erskine, Roy ..... Sioux Falls
Fairley, J. Vern ..... Gayville
Fletcher, Everett A. ..... Garden City
Flisrand, William ..... Florence
Frybarger, John Leonard ..... Wayside, Neb.
Gale, Veo H. ..... Farmingdale
Gilman, Howard E. ..... Mission Hill
Gleeson, Frederick ..... Mitchell
Green, David O. ..... Highmore
Grindberg, Anna ..... Trent
Grindberg, Valdine ..... Trent
Gunderson, Jerome ..... Yankton
Hamilton, L. B. ..... Stratford
Hanson, Leslie ..... Bridgewater
Hanson, Victor ..... Vermillion
Harlan, Theron ..... Vera
Harper, Bert T. ..... Hurley
Haugen, Clara M. ..... Brookings
Hayes, Hobart M. ..... Parker
Hetland, Conrad ..... Montrose
Hiscox, Faye ..... Montrose
Hobbie, Sophie ..... Flandreau
Houghton, Lewis ..... Brookings
Hullinger, Artie ..... Vera
Inglis, Palmer ..... Wessington Springs
Jensen, Corliss C. ..... Farmingdale
Johnson, Clifford ..... Gayville
Johnson, Hilda ..... Sherman
Johnson, Floyd ..... Arlington
Johnson, Vera ..... Balaton, Minn.
Keck, Harley ..... Philip
Keith, Mark ..... Armour
Knickrehm, Harry ..... Carpenter
Kozel, Royal L. ..... Blunt
Kringen, Alma M. ..... Sherman
Kuehn, Bert ..... Arlington

Leach, Ralph ..... Ree Heights
Le Lacheur, John ..... Sisseton
Longman, Wilford ..... Toronto
Lunda, Leonard ..... Chancellor
Lundeen, Florence ..... Aurora
Lyons, Alvin ..... Agar
McCormick, Frank ..... Doland
McWhirter, Wilson ..... Vivian
Markve, Carl ..... Ortley
Mathieson, Donald ..... Philip
Merry, Lyman George ..... Dell Rapids
Millage, Joseph ..... Mitchell
Nelson, Helene M. ..... Tyler, Minn.
Nelson, Lawrence ..... Geddes
Nelson, Lawrence R. ..... White Rock
Nelson, Metha ..... Gayville
Palmgren, John ..... Hot Springs
Parcella, Mabel ..... Balaton, Minn.
Paul, Eva Ada ..... Doland
Paulson, Gustav ..... Centerville
Payne, Harlan W. ..... Woonsocket
Peterson, Ella A. ..... Viborg
Plucker, Anna ..... Lennox
Powers, Robert ..... Delmont
Prouty, Forde ..... Hayti
Prouty, Ole F. ..... Hayti
Quincey, William A. ..... Sioux Falls
Reinecke, Bryan ..... Seneca
Roll, Eugene ..... Oral
Rose, C. Delbert ..... Wagner
Rovang, Albert ..... Bryant
Rudy, Charles ..... Cavour
Schmidt, Lilly ..... Alpena
Schubert, Atlee ..... Academy
Sckerl, Rudolph ..... Lake City
Scott, Louis ..... Lake Andes
Sebion, Tdwin ..... Webster
Segard, Henry ..... Mission Hill
Selix, Roy ..... Brookings
Shult, Milton ..... Doland
Shult, Myrtle ..... Doland
Sloat, Everett ..... Gettysburg
Sloat, May ..... Lowry
Sloat, May ..... Loowry
Slocum, Arthur I. ..... Glenham
Slocum, George ..... Glenham
Smidt, Thorvald ..... Freeman

Smith, Darwin ..... Sioux Falls
Snow, Francis C. ..... Vermillion
Sorenson, Sarah ..... Arlington
Spicer, Clarence C. ..... Wessington
Spicer, Lawrence ..... Wessington
Steen, Edward ..... Brookings
Stites, Orville ..... Brookings
Stitt, Lysle ..... Hitchcock
Stormo, Albert ..... Hazel
Sundet, Philip ..... Brookings
Swanson, Otto ..... Pukwana
Swanson, Chester ..... Pukwana
Taylor, Norman ..... Fort. Pierre
Telkamp, Ernest ..... Brookings
Thompson, Oscar B. ..... Springfield
Tjaden, George ..... Harrisburg
Todd, Florence ..... Canton
Trumble, Albert ..... Okobojo
Verdin, Jennie ..... Irene
Waltner, John P. ..... Freeman
Ward, Howard ..... Northville
Westergaard, Bertha ..... Viborg
Willcuts, B. Russell ..... Millboro
Williamson, Clifford ..... Artesian
Wright, Warren ..... Valley Springs
Wyant, George F. ..... Reliance

SUMMER SCHOOL

1916

Aaron, Annabelle ..... Arlington
Adams, Florence ..... Castlewood
Alrick, Lee ..... Brookings
Anderson, Laura ..... Vilas
Anderson, Leon ..... Rapid City
Anderson, Nellie ..... Bryant
Arneson, Constance ..... Oldham
Arneson, William ..... Oldham
Arvidson, Mae ..... Lake Norden
Bakke, Adele ..... Howard
Bakke, Josie ..... Howard
Baker, Laura ..... Carpenter
Bamsey, Mae ..... Howard
Barton, Ora ..... Spencer, Ind.
Beck, Letty E. ..... Winfred
Belk, Vida M. ..... Henry
Bensten, Laurel ..... White

Bennett, L. L. ..... Brookings
Bergeim, Joseph ..... Brookings
Blecker, Samuel ..... Brookings
Bickel, Eva ..... Watertown
Bickel, Gladys ..... Watertown
Bohnhoff, Kathryn ..... Bruce
Browning, Lenore ..... Brookings
Burns, Alta ..... Watertown
Calkins, Elizabeth ..... St. Lawrence
Carlisle, Marian ..... Brookings
Catlett, Margaret ..... Brookings
Christianson, Mary ..... Jasper, Minn.
Colliton, Dollie ..... Brookings
Colliton, George ..... Brookings
Cotton, Ethel ..... Pipeston, Minn.
Conklin, Allen G. ..... Oldham
Cook, Orlan ..... Clear Lake
Crofoot, Vanita ..... Webster
Cronin, Teresa ..... Egan
Dahlen, Nora ..... Oldham
Daly, Gladys ..... Watertown
Daily, Margaret ..... Carthage
Dalthorp, Rosella ..... Volga
De Walt, Pearle ..... Brookings
Dimmette, Chas. L ..... Brookings
Doyle, Margaret ..... Colman
Dunster, Annie ..... Colman
Dybdahl, Julian ..... Brookings
Elliott, Warren G. Jr. ..... Brookings
Erie, Frances E. ..... Brookings
Eves, Neva ..... Castlewood
Evans, Roy ..... Brookings
Fasheim, Olga ..... Howard
Francis, Ada ..... Mound City
Frandsen, Josephine ..... Brookings
Furnish, Alta ..... Bunceton, Mo.
Geyer, Mary ..... Brookings
Gotthold, Roy C. ..... Brookings
Hammer, Sarah ..... Toronto
Hanson, Hazel ..... Brookings
Handwerk, Gertrude ..... Brookings
Handwerk, Clara ..... Brookings
Hanson, Ross P. ..... Brookings
Harper, William ..... Canton
Heitland, Kate ..... Wolsey
Holliday, Jack ..... Brookings
Hubbard, Ethel ..... Arlington

Hyde, G. Hara ..... Brookings
Irish, Edith ..... Brookings
Jackson, C. F. ..... Salem
Jarvis, Ruth ..... Brookings
Jensen, Esther ..... Howard
Johnson, Ethel ..... Brookings
Jodozi, Anna ..... Oldham
Kaiser, Anna M. ..... Howard
Kast, Ada ..... Havana, N. D.
Kazaerzak, Mary ..... Erwin
Kerr, Irene ..... Pipestone, Minn.
Keating, enevieve ..... Flandreau
Kennard, George ..... Brookings
King, Esther ..... Brookings
Kirkevold, Petra ..... Hendricks, Minn.
Knutson, Robert ..... Brookings
Kotan, Theresa ..... Flandreau
Larson, Lars P. ..... Vilas
Lee, George ..... Watertown
Leighty, William ..... Brookings
Lindblom, Phebe ..... Canova
Loeck, John F. ..... Howard
Lynch, Edward ..... Brookings
Lynch, Ruth ..... Brookings
Martella, Lydia ..... Thomas
Mathews, Marjory ..... Brookings
Mathews, Zoa ..... Brookings
Mathieson, Homer ..... Watertown
Mitchell, Alice ..... Clear Lake
Mitchell, Donald ..... Brookings
Mitchell, Frances ..... Clear Lake
Mohr, Lucille ..... Watertown
Montgomery, Mae ..... Wolsey
Moore, Ellen ..... Newport, Va.
Morgan, Della ..... Armour
Nelson, Ineta ..... Dell Rapids
Nesseth, Gladys ..... Volga
Neyhart, Helen ..... Gorman
Nord, Daisy ..... Brookings
Onstine, Everett ..... Flandreau
Orhrans, Venie ..... Brookings
Pearson, Blanche ..... Brookings
Pearson, Gladys ..... Brookings
Peddicord, Helen ..... Brookings
Peters, Dorothy ..... Granville, Ia.
Pierce, Ruth ..... Brookings
Peterson, Harriet ..... Brookings

Piehl, Martha ..... Esmond
Pickett, Hubbie ..... Brookings
Platt, Ida ..... Viborg
Plumb, Olive ..... Brookings
Riis, Jens ..... Brookings
Ridout, Lillian ..... Brookings
Ridout, Olive ..... Brookings
Rilling, Elsie ..... Brookings
Rogen, Thalma ..... Sherman
Rutherford, Jessie H. ..... Chicago, Ill.
Sanders, Cecilia ..... Brookings
Schliemann, Gertrude ..... Hartford
Schmidkunz, Julia ..... Hazel
Seagreen, Olive ..... Turton
Severson, Florence ..... Brookings
Severson, Lenora ..... Volga
Shaw, Happy ..... Madison
Sherman, Mae ..... Howard
Sherman, Sara ..... Howard
Skiff, Hazel ..... Brookings
Slaatta, Emma ..... Wilmot
Sloat, Ora ..... Lowry
Smith, Edna ..... Egan
Smith, Rosa ..... Egan
Snodgrass, Agnes ..... Miller
Snyder, Dorothy ..... Bruce
Spurling, Dorothy ..... Brookings
Steele, Edmund ..... Howard
Stordahl, Anna ..... Carthage
Strand, Tansy ..... Howard
Street, Emma J. ..... Albee
Swenson, Selma ..... Jasper, Minn.
Tate, May ..... Brookings
Voss, Edward F. ..... Garvin, Minn.
Watson, Edith E. ..... Brookings
Wardahl, Leah ..... Flandreau
Weber, Anna ..... Watertown
Wendt, Eva ..... Fulton
Winright, George ..... Alexandria
Wolber, Oscar ..... Brookings
Wold, Ruby ..... Brookings
Woodruff, Victor ..... Miller
Worden, Winnie ..... Brookings
Zickrick, Elmer ..... Murdo

SHORT COURSES

CREAMERY—THREE MONTHS

Anderson, Chris. ..... Fowler, Colo.

Blanchard, George ..... Brookings
Cook, Ralph ..... Alva, Wyoming
Gerner, William ..... Chausse, Mont.
Howell, Arthur S. ..... Florence
Hurd, Wm. James ..... Bruce
Johansen, Eines ..... Seaman, Ohio
Liesner, Will ..... Jackson, Wis.
Looysen, Herphy L. ..... White
Moerman, Paul ..... Boyden, Iowa
Nachtigal, Emil J. ..... Academy
Neal, Floyd ..... Brookings
Nelson, Nels Chris. ..... Perth Amboy, N. J.
Nielson, Arthur W. ..... Lake Benton, Minn.
Olson, Herbert ..... Milaca, Minn.

FARM ENGINEERING

Anderson, Anthony ..... Crooks
Anderson, Edwin ..... Hamill
Behnke, Henry W. ..... Britton
Bergh, Martin O. ..... Volga
Brown, Ernest ..... Lucas
Carrington, David ..... Mt. Vernon
Deville, Peter W., Jr. ..... Watertown
Erickson, Edgar ..... White
Gales, William N. ..... White Lake
Hammer, Alfred ..... Hammer
Hammer, Andrew ..... Hammer
Hansen, Fred Hans ..... Millard
Harriman, Forest ..... Mapleton, Minn.
Hank, Basil ..... Lake Andes
Hausman, Charles LeRoy ..... Springfield
Heaton, Guy H. ..... Gary
Johnson, Otto W. ..... Flandreau
Kelty, Frank S. ..... Plankinton
Kelty, John ..... Plankinton
Kinyon, John Glenn ..... Arnott
Kjeldseth, Ole Adeli ..... Irene
Krogvig, Peter ..... Mission Hill
Larsen, Frederick ..... Stickney
Lee, August ..... Volin
McDonald, Charles E. ..... Tabor
McKnight, Clyde ..... Brookings
Martinmaas, Werner ..... Orient
Meier, Leo P. N. ..... Woonsocket
Mikkelson, Raymond A. ..... Wakonda
Nelson, Victor L. ..... Gayville
Ness, Alvin ..... Bruce

Nesson, Harold ..... Aurora
Nolan, Thomas Patrick ..... Plankinton
Peterson, Clarence W. ..... Gayville
Quincey, Ralph P. ..... Sioux Falls
Rymerson, Selmer ..... Toronto
Sayville, George ..... Plankinton
Strub, Guy C. ..... Manchester
Tipley, Lewis ..... Geddes
Tribitt, Clarence H. ..... Altamont
Wideriksen, Hans ..... Stickney
Witzel, Roy ..... Brookings

FARM AND HOME COURSE

DEC. 26-30, 1916.

Auth, Chris. ..... Brookings
Auth, Joe ..... Elkton
Baldridge, F. F. ..... Brookings
Barber, Clare ..... Mitchell
Bassen, P. M. ..... Platte
Baxter, H. E. ..... Hazel
Baxter, Everett ..... Hazel
Baxter, Oliver ..... Hazel
Berg, A. ..... Volga
Berg, J. E. ..... Volga
Berg, Matt ..... Castlewood
Blecker, H. J. ..... Brookings
Bolles, M. N. ..... Brookings
Burnett, E. M. ..... Sutherland, Ia.
Caldwell, Lacy ..... Brookings
Carr, E. W. ..... St. Lawrence
Carson, Geo. L. ..... Bradley
Chamberlain, A. E. ..... Aberdeen
Chase, A. B. ..... Brookings
Chenoweth, R. F. ..... Brookings
Clement, Embert ..... Sinai
Coon, Ralph ..... Bushnell
Cram, R. E. ..... Esmond
Crase, Dorlan ..... Brookings
Crase, W. M. ..... Brookings
Crawford, Anson L. ..... Brookings
Dawes, H. E. ..... Fulton
Dunlop, J. W. ..... Brookings
Englund, W. O. ..... Bratsburg
Evans, Edgar ..... Brookings
Fenn, George ..... Brookings
Fjerstad, C. C. ..... Brookings
Gellerman, Fred ..... Cavour

Gotthold, Roy C. ..... Miller
Gustafson, Carl J. ..... Aberdeen
Haman, Carl H. ..... Brookings
Hart, E. J. ..... Brookings
Haynes, A. L. ..... Scotland
Heathcote, F. J. ..... Summit
Helfenstien, Harry ..... Parker
Hinsvark, M. B. ..... Cottonwood
Hughes, Felan T. ..... Ft. Pierre
Jackson, Thos. J. ..... Ft. Thompson
Johnson, G. S. ..... Brookings
Johnson, Jacob ..... Lake Preston
Johnston, John, Sr. ..... Brookings
Jones, H. C. ..... St. Lawrence
Keck, J. A. ..... Brookings
Knutson, Sigurd V. ..... Carthage
Kremer, Frank ..... Brookings
Lawrence, Frank ..... Yale
Lawrence, James ..... Yale
Lawshe, Ben B. ..... Aberdeen
Leibert, Peter ..... Bushnell
Lewis, Knute ..... Lake Preston
Lindsey, Dave ..... Pierre
Lindsay, James ..... Brookings
Lynch, Edward ..... Brookings
McGrath, Peter ..... Brookings
Mair, C. B. ..... Brookings
Malone, R. S. ..... Huron
Martin, Clark ..... Brookings
Morse, Carl ..... Seneca
Newton, Chas. ..... White
Nicol, John ..... Wetonka
O'Hair, E. B. ..... Brookings
Olson, Nels ..... Hetland
Palm, A. W. ..... Watertown
Peddicord, E. S. ..... Brookings
Perley, Geo. A. ..... Flandreau
Peterson, P. C. ..... Bonilla
Peterson, P. O. ..... Brookings
Pierce, E. F. ..... Brookings
Prentice, Z. ..... Brookings
Quail, A. E. ..... Volga
Richardson, David ..... Volga
Rilling, Fred ..... Brookings
Risch, John ..... Elkton
Robbins, Albert ..... Spencer
Rude, N. G. ..... Volga

Kuttum, Julius ..... Hendricks, Minn.
Sanderson, G. R. ..... Brookings
Schuler, M. G. ..... Brookings
Schuller, D. ..... Brookings
Schwenk, A. E. ..... Brookings
Selix, Dewey ..... Brookings
Selix, Sheridan ..... Brookings
Simonson, Herbert ..... Brookings
Skillestad, Oscar ..... Oldham
Sloan, Jas. ..... Brookings
Sloan, Will ..... Brookings
Slocum, O. C. ..... Brookings
Snyder, F. J. ..... Bruce
Somers, W. J. ..... Brookings
Stark, Oscar ..... Estelline
Strub, Guy ..... Manchester
Sussex, S. W. ..... Highmore
Swartz, Earl ..... Canton
Swenson, Gust. ..... Mitchell
Thompson, Ben B. ..... Volga
Thompson, Jens ..... Odlham
Thornber, Jas. ..... Brookings
Tobias, Sever ..... Bradley
Tompkins, A. T. ..... Brookings
Tompkins, A. W. ..... Brookings
Tompkins, Lawrence ..... Brookings
Ucker, Charles ..... Clear Lake
Warner, L. H. ..... DeSmet
Welch, W. H. ..... Brookings
Willey, E. B. ..... Brookings
Wright, G. A. ..... Ireton, Ia.

WOMEN

Austin, Ethel ..... Brookings
Barr, Mrs. E. W. ..... St. Lawrence
Egeland, Mrs. W. O. ..... Bratsburg
Fenn, Mrs. Geo. ..... Brookings
Gates, Mrs. F. L. ..... Brookings
Hart, Mrs. E. J. ..... Brookings
Hart, Marguerite ..... Brookings
Haynes, Mrs. A. L. ..... Scotland
Hughes, Mrs. Felan T. ..... Ft. Pierre
Heibert, Mabel ..... Bushnell
Heibert, Mrs. Peter ..... Bushnell
Hewis, Knute (Mrs.) ..... Lake Preston
Hair, Mrs. E. B. ..... Brookings
Richardson, Mrs. David V. ..... Volga

Slocum, Mrs. O. C. ..... Brookings
Swenson, Hettie ..... Mitchell
Webster, Mrs. Mattie ..... Woonsocket
McCall, Mrs. L. E. ..... Brookings
Patty, Mrs. R. L. ..... Brookings
Jones, Mrs. Laura ..... Jefferson, Ia.
Rowe, Mrs. H. S. ..... Brookings
Rowe, Nellie ..... Brookings
Warner, Mrs. H. L. ..... DeSmet
Caldwell, Kate ..... Brookings
Auth, Mrs. D. ..... Brookings
Perisho, Mrs. E. C. ..... Brookings
Swenson, Miss Laura ..... Brookings
Clinesmith, Miss Abbie ..... Brookings
McGarry, Mrs. ..... Brookings
Gates, Miss ..... Brookings
Peterson, Miss Ethel ..... Brookings

SUMMARY

1916-17.

RANK

	Men	Women	Total	Gr. Ttl.
Collegiate—				
Post Graduate Students	5	0	5	
Seniors	38	17	55	
Juniors	43	28	71	
Sophomores	72	35	107	
Freshmen	78	55	133	
Specials	3	7	10	
Total Collegiate	239	142	381	381
Preparatory—				
Fourth Year	11	12	23	
Third Year	9	8	17	
Second Year	11	9	20	
First Year	14	7	21	
Total Preparatory	45	36	81	81
Music Students	44	63	107	107
School of Agriculture—				
Fourth Year	28	11	39	
Third Year	24	4	28	
Second Year	40	15	55	
First Year	112	31	141	
Total School of Agriculture	204	61	265	265
Summer Session	36	119	155	155
Short Courses—				
Creamery	15	0	15	
Farm Engineering	42	0	42	
Farm and Home	120	40	160	
Junior Short Course	68	0	68	
Total Short Courses	245	40	285	285
Grand Totals	813	461	1274	1274
Names Repeated	66	84	150	150
Net Totals	747	377	1124	1124

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